

FREE! MINI MAG

FIRST OF A THREE-PART SERIES ON THE
NINE BEST JAPANESE PERFORMANCE CARS
TO BUY AND TUNE BEFORE YOU DIE
THIS ISSUE: MITSUBISHI EVO IX, TOYOTA SUPRA TT, MAZDA 3 MPS



JAPANESE Performance

WIN!
A handling
makeover from
Elbach and
Torque Developments
Elbach
United Kingdom
only

**CIVIC
TYPE R
SPECIAL**
PAST MASTERS
CELEBRATED
EK9, EP3
& FN2



SITTING *pretty*

700BHP, CARBON CLAD EVO IX ON AIR RIDE SHUNS THE TRACK
TO SNATCH TROPHIES ON THE SHOW 'N' SHINE CIRCUIT INSTEAD!



NEW TYPE R DRIVEN!
VTEC+TURBO REALLY IS THAT GOOD!

AUG '15 £4.50
No.175 www.chpltd.com



chp

ALSO INSIDE...

ROTARY MASTERPIECE
RX-8 RACER GETS RX-7 HEART

THE DARK DESTROYER
500BHP IMPREZA TRACK SLAYER

RETRO REVOLUTIONARY
SR20-ENGINED DATSUN 510

BC

**BUILT WITH PRECISION
MEASURED BY SUCCESS**

BC Racing are renowned worldwide for their high performance suspension systems.



SYSTEM FEATURES

- Pillowball upper mount
- Camber adjustable top mounts
- Aluminium top plates
- 30 way adjustable damping
- Adjustable spring platform
- Height adjustable bottom mount
- Bearing mounted spring platforms
- Dust boot to protect damper seals
- High quality body finish
- Springs and accessories available

* features depend on application

EVERY DAMPER DYNO TESTED

Every BC Racing damper is dyno tested in-house. Our coilover kits are only assembled using matched dampers to ensure equal and efficient damping throughout their range.

Because we only use matched coilovers; you're assured of maximum stability, handling and performance on both the street and circuit.

0% FINANCE AVAILABLE

**6 months 0% finance is available
on the full BC Racing coilover range.**

To apply for finance visit www.bcracing.co.uk, choose the product you are interested in and follow the checkout procedure. Click the finance option and follow the instructions for an instant decision.

Minimum 10% deposit with the remaining outstanding paid in 6 equal monthly installments.

Example:

Subaru Impreza GC8 BR Series coilovers	£769.00
10% deposit	£76.90
6 equal monthly payments of	£115.35
Total paid	£769.00
Total interest paid	£0.00

INSTANT APPLICATION ONLINE

street & circuit

PERFORMANCE SUSPENSION SYSTEMS

WWW.BCRACING.CO.UK WWW.BCRACING.CO.UK WWW.BCRACING.CO.UK

apex
PERFORMANCE

BR
SERIESFULLY
ADJUSTABLENOW AVAILABLE
AT £699 - £769IDEAL SETUP FOR
**ROAD, TRACK
AND RACE**

The BR Series coilovers use a large 46mm diameter piston in a 53mm diameter damper body to maximise oil capacity. As the damper unit operates, the oil contained within heats up. The viscosity of oil changes as its temperature varies which can lead to changes in the damping characteristics of the unit.

BC Racing only use a very high quality oil with their coilovers but go that extra mile to maximise performance and build their BR range with a large 53mm diameter damper body. This increases the capacity of the unit which increases the volume of oil contained which in turn reduces the peak temperature and so significantly improves damper performance.

0% FINANCE
AVAILABLE**ER**
SERIESEXTERNAL
RESERVOIRNOW AVAILABLE
AT £1399IDEAL SETUP FOR
**THE SERIOUS
DRIVER**

BC Racings flagship coilovers are the external reservoir ER Series with separate compression and rebound damping adjustment. The ER Series coilovers bring with them the high quality and unique features seen on the BR and RM type but have the additional benefit of external reservoirs and the ability to allow the end user to individually adjust and set compression and rebound damping rates.

The external reservoir ER Series coilovers allow BC Racing to increase the oil capacity of the damper unit. The additional oil capacity reduces peak oil temperatures which decreases variations in damping rates due to oil viscosity changes. The reduction in damping rate variations improves handling and ultimate on road and track performance.



3D camber/caster adjustable front top mounts and/or camber adjustable rear top mounts are included by default with ER Series kits where available

BC RACING SUPPORT & SPARES

BC Racing coilovers have proven themselves to be ultra durable and more than capable of surviving multiple British winters but it's good to know we've got you covered for spare parts when you need them.

There will be no waiting months for parts or having to send the coilovers back to ourselves for rebuilding. Nor will you be forced to buy a complete coilover unit should you need to replace just one component nor, as is the case with some brands, will you have to buy a complete new kit because components cannot be supplied or because the component costs are so high that it is financially unviable to service your existing coilovers.

We can supply every single component right down to the last nut, bolt and stud so should you need a new damper then you just need to buy a new damper. Not only that but all the spares are priced extremely reasonably, you won't find yourself facing huge bills should you require any parts.

For BC Racing spares and accessories, visit our website and click 'Accessories'

We carry a massive range of spare parts in stock and anything out of stock takes a maximum of 10 working days to arrive with us.

**REPLACEMENT
DAMPERS**

from just £92.50 (BR Series)

FINANCE SUBJECT TO STATUS. TRADE ENQUIRIES WELCOME. E&OE. PRICES SHOWN INCLUDE VAT. SEE WEBSITE FOR LATEST SPECIFICATIONS

CALL US TODAY AND CHAT WITH OUR SPECIALISTS
ON CHOOSING THE RIGHT PACKAGE FOR YOUR CAR

CALL 01274 683 633**WWW.BCRACING.CO.UK****OVER 500
EUROPEAN
& JAPANESE
FITMENTS****WWW.BCRACING.CO.UK WWW.BCRACING****BC**
street & circuit**KSPORT****ÖHLINS****HARDRACE****D2**



FREE MAINLAND UK DELIVERY
WORLDWIDE SHIPPING AVAILABLE



TEGIWA

WWW.TEGIWAIMPORTS.COM

PERFORMANCE PARTS FOR JAPANESE CARS

NOT LISTED ON OUR WEBSITE? WE CAN SOURCE ALMOST ANY PRODUCT

CALL OUR TEAM OF EXPERTS 01782 33 44 40

skunk2
RACING

SHOP NOW
AT SKUNK2 RACING EUROPE

WWW.TEGIWAIMPORTS.COM
CALL US ON 01782 33 44 40



I predict a riot...



There are some things in life that are just guaranteed to get people's backs up. Be it serving up a grease-laden bacon sarnie to a strict vegetarian or telling a mother her baby looks like a bulldog chewing a wasp. You know the outcome even before you've started. Another revelation that has surely caused its fair share of indignation and offence recently came from that most honourable of motoring manufacturers, Honda. The big H has gained a strong and loyal following over the years, built upon the foundation of its most strongly fortified position on its engines. Natural aspiration is as important to the brand as the red H that adorns its sportiest models, or at least it was... The new halo car in Honda's line up, the latest fourth generation Civic Type R features – of all things – a turbocharger. That very word is enough to send chills down the spine of Type R purists and Honda must have known they'd ruffle a few of the faithful's feathers with that bombshell. But the truth is, they really have nothing to fear. Embrace the metallic snail, friends, for it brings only joy!

We tested the new Type R and can tell you that the result is quite astonishingly good and the potential for further tuning has gone through the roof! Check out the report for yourself on page 82. But it also served to highlight just how great the car's forebears are, too, so we decided to get them all together for a celebration of Type R-ness, and to say a final farewell to the screaming NA motors of old as we welcome a factory forced induction Type R into the fold. The action starts on page 70. Keeping it Honda, we've also been hanging with the brand's WTCC drivers at the Nürburgring (page 77) and checking out the best examples from the US at the annual Eibach Honda meet on page 28.

But even if you're not a Honda fan, don't be lighting that Molotov cocktail just yet, as we've also got plenty for you, too, including a show-winning 700bhp carbon clad Mitsubishi Evo, all the action from the BHP Performance show, a 600bhp Celica GT4, an SR20-engined Datsun 510, a killer track-tuned GC8 Impreza and a Mazda RX-8 with an RX-7 heart. So there, crisis averted. Now if you could all move along please. There's nothing to see here...

DAN SHERWOOD





The Tuners Choice

Mongoose Exhausts Systems are one of the most highly regarded stainless steel exhaust manufacturers in the UK offering an expanding range of exceptionally high quality performance enhancing sports exhaust systems for many marques of cars.

With nearly 30 years extensive experience of tuning cars our Mongoose brand of exhausts

system are designed, developed using our extensive in house facilities in Congleton including our 4wd rolling road.

All Mongoose Exhausts are made in the UK from T304 aerospace grade stainless steel, bent using the finest mandrel bending machines and welded by experienced and enthusiastic staff to exacting standards.

Every Mongoose Exhaust component, be it a down pipe, a back box, or a full exhaust system is designed on the car it is meant to fit – that way we can guarantee a perfect fit every time.



Make/Model	Price	Make/Model	Price	Make/Model	Price
HONDA		MITSUBISHI		NISSAN	
Civic Type-R EP3 2001-2005 Cat Back	£ 461.63	Lancer Evo 4/5/6		Lancer Evo X	
Accord Type-R CH1 1998-2003, with Cat Replacement	£ 749.19	Full System with Cat Replacement	£ 658.38	Full System with Sports Cat	£1,117.12
Accord Type-R CH1 1998-2003, Full System without Cat Replacement	£ 681.08	Lancer Evo 4/5/6		Lancer Evo X	
Accord Type-R CH1 1998-2003, Full System without Downpipe	£ 643.25	Full System without Cat Replacement	£ 605.40	Full System with Cat Replacement	£ 857.66
Accord Type-R CH1 1998-2003, Full System without Downpipe	£ 643.25	Lancer Evo 4/5/6		Lancer Evo X Cat Back	£ 699.10
Accord Type-R CH1 1998-2003, Cat back	£ 552.44	Full System without Downpipe	£ 514.59	NISSAN	
Civic Sport EP2 2001-2005, Cat Back	£ 446.49	Lancer Evo 4/5/6 Cat Back	£ 454.05	300ZX (Does not fit SWB cars), Cat Back	£ 718.92
		Lancer Evo 7/8/9		350Z, Cat Back and Cat Replacements	£1,051.90
		Full System with Cat Replacement	£ 643.25	Nissan 350Z, Cat Back	£ 749.19
		Lancer Evo 7/8/9		SUBARU	
		Full System without Cat Replacement	£ 590.27	Impreza Turbo 2001-2007	
		Lancer Evo 7/8/9		Full System with Cat Replacement	£ 718.92
		Full System without Downpipe	£ 484.32	Impreza Turbo 2001-2007, 1st Cat Back	£ 491.90
		Lancer Evo 7/8/9 Cat Back	£ 416.22	Impreza WRX 08 on (Single Exit)	
				Full System with Sports Cat	£ 1,113.84
				Impreza WRX 08 on (Single Exit)	
				Full System with Cat Replacement	£ 851.76
				SUZUKI	
				Swift Sport 1.6, Cat Back (single silencer)	£ 499.20
				Swift Sport 1.6, Cat Back (twin silencer)	£ 530.40
				TOYOTA	
				MR2 Mk1 1985-1990 Full System	£ 454.05
				MR2 Mk2 1991on (3SGE engined cars only)	
				Cat Back and Cat Replacement	£ 529.73
				MR2 Mk2 1991on, Cat Back	£ 446.49
				Celica GT4 ST165/185 1989-1993 Cat Back	£ 544.86
				Celica GT4 ST205 1993-1999 Cat Back	£ 544.86
				Toyota Starlet Turbo EP91	
				Full System with Cat Replacement	£ 556.92



Powerchips.com
UNLOCK THE POTENTIAL

Colt Performance Engineering Ltd
PERFORMANCE ENGINEERING LTD

Unit 6, Newman Close, Congleton, Cheshire CW12 4TR

Prices INCLUDE VAT unless otherwise stated. E. & O. E.

TEL: 01260 279604



WWW.MONGOOSEEXHAUSTS.COM



70



FEATURES

18 **DON'T HATE ME 'COS I'M PRETTY**

ON THE COVER

702bhp, carbon bodywork and air ride make this Evo IX more than a beauty queen

28 **EIBACH HONDA MEET**

JP goes Stateside to check out the US suspension maestro's annual Honda meet

32 **BHP PERFORMANCE SHOW**

Mental motors tore up Lydden Hill for our amusement at this year's BHP show

38 **THE RESTORATION MAN**

600bhp Celica GT4 is brought back from the dead by a Toyota-mad mechanic

46 **SIMPLE PLEASURES**

US retro fan builds an immaculate Datsun 510 with a stroked SR20 motor

54 **FIRST THE WORST, SECOND THE BEST**

Rotary guru builds world's first fully functioning RX-7-powered Mazda RX-8 racer

62 **THE DARK DESTROYER**

Ultra hardcore wide arch GC8 Impreza is hell bent on circuit racing domination

70 **THREE OF A KIND**

ON THE COVER

JP celebrates the Civic Type R by reuniting its three previous generations

70 **ROAD TO REDLINE**

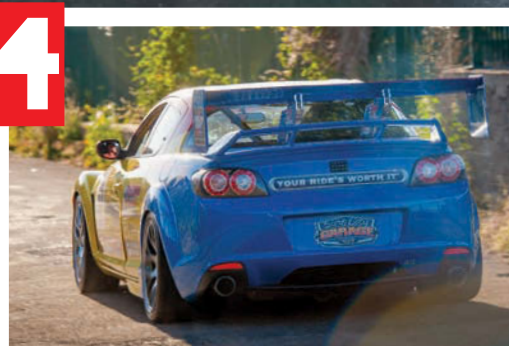
Type R fans descend on the Nürburgring for a weekend of WTCC action

77 **RETURN OF THE KING**

ON THE COVER

The Civic Type R has returned: turbocharged and ready to rule the roost!

54



62



SUBSCRIBE

Subscribe now for great money-saving deals. Visit:
www.japanesepowermagazine.co.uk

BEST OF BRITISH

100% UK MADE BRAKES

EBC Brakes pads are now made using the Nupac Canada NRS hook retention backing plate system, guaranteed NEVER to debond



BRAKE PADS - Choose from grippy Greenstuff for spirited use on lighter hot hatches, Redstuff for fast street on medium weight cars, Yellowstuff for all out grip and track use on lighter cars or Bluestuff for the ultimate street and trackday pad that has set the Impreza and EVO community buzzing. Latest compound is the Orangestuff full race grade pads.



Ultimax2

WANT A QUALITY DAILY DRIVER PAD?

Try the Ultimax 2 premium replacement pad.

- ✓ The world's first and only true ECO friendly pad
- ✓ Great brake feel for everyday driving and
- ✓ A new lower price point



FOUR GREAT DISC CHOICES

GD series slotted and dimpled for fast street, USR fine slotted or BSD series BLADE discs for fastest street and track day use. For daily driver cars the EBC premium OE replacement discs are a great choice with a superb price point and great value for money.

EBC
BRAKES
www.ebcbrakes.com

12



REGULARS

12 NEWS

Lap records banned from the 'Ring, dates for you diary, show previews: Trax and King of Europe, 5mins with...Tom Gannon, 45th Anniversary Nissan GT-R, New Juke-R Nismo, SVA Imports to compete at World Time Attack Championship, Dynotech's new dyno, Litchfield opens supercar centre

87 JAPSTUFF

Jass Performance MX-5 trim kits, Aerodynamics book, Titan Motorsport carbon throttle bodies for EP3 Type R, Ultra Racing EP3 Type R strut brace, Mishimoto liquid chill coolant additive, Meguiar's car deodorant, Studio 448 apparel, B-G stringlines, Rota Recce 17in wheels, AP Suzuki Swift coilovers

92 THE GARAGE

Project WRX's stroker kit engine build gets underway, Project MX-5 gets its first taste of mods with some new EBC stoppers and a fresh set of Rota rims, Project Subaru STi also gets some new rolling stock in the form of some new Speedline Imperatore wheels and grippy Toyo T1 Sport tyres

87



92



Editor Dan Sherwood
Tel: 01480 219990
jap@chpltd.com

Studio Manager Peter Simpson

Designer Joel Mitchell

Group Advertisement Manager
James Stainer
james.stainer@chpltd.com
Tel: 01883 731152; Fax: 01883 740361

Ad Production
Ant Menhennet Tel: 01883 731152
Fax: 01883 740361
ant.menhennet@chpltd.com

CHP Publications Ltd 1 The Alma Building,
Brewer Street, Bletchingley, Surrey RH1 4QP
Tel: 01883 731150; Fax: 01883 740361;
chp@chpltd.com

Administration Allie Burns, Sandra Househam
Accounts Bev Brown
Subscriptions Debi Stuart
debi.stuart@chpltd.com

Website
www.japaneseperformancemagazine.co.uk

Managing Director Clive Househam

Worldwide retail distribution
For worldwide newsstand availability queries
contact Phil Sait, CHP Distribution Manager,
Seymour Distribution Ltd.
Tel: 020 7429 4000
Email: phil.sait@seymour.co.uk

Printed in England
Garnett Dickinson Print Ltd;
Tel: 01709 768000

© CHP Publications Ltd, 2015
ISSN 1467779



chp

pocketmags



While every care is taken in compiling **Japanese Performance**, the publishers cannot be held responsible for any effects arising therefrom

Japanese Performance is always available at



EUROPE'S PREMIER
JAPANESE
PERFORMANCE
PARTS SUPPLIER



SUMOPOWER



AUTHORISED
EUROPEAN
DISTRIBUTORS



WORLDWIDE DELIVERY AVAILABLE
TRADE ENQUIRIES WELCOME



@SUMO_POWER



FACEBOOK.COM/SUMOPOWER

SUMOPOWER.COM
SALES@SUMOPOWER.COM
TEL +44 (0) 1945 479125



NO MORE LAP RECORDS AT THE 'RING!

IN A DEVASTATING DOUBLE-BLOW, THE OWNERS OF THE 'RING HAVE ANNOUNCED A BAN ON ALL RECORD LAP TIMES, AND THE CREATION OF NEW SPEED LIMITS ON THE CIRCUIT

In a move that will disappoint car fans around the globe, testing at the 'Ring is finished. At least for now. No more manufacturer lap-time squabbling. In addition, German authorities have imposed maximum speed limits on two sections of the popular 12.9-mile track, following a tragic accident at the circuit in which a spectator at a race was killed.

The affected areas of the track include a 250kmh (155mph) limit from the gantry to Döttinger Höhe, and a 200kmh (125mph) limit from Hocheichen to Flugplatz, that then increases to 155mph on the run up to the crest at Schwedenkreuz. In both places, only the fastest cars will be affected, so is it really that big a deal?

The short answer is 'yes'. If only because it signifies the change that is

taking place at the 'Ring. For years it has been owned by the German government. Now it has been sold to people who want to make money from it, the health and safety police are on their way. One trackday has already been red flagged because someone exceeded the speed limit. It remains to be seen what the punishments will be, and how strictly they will be enforced on public days.

The announcements come after the tragic accident on 28th March, when the driver of a flat-bottomed GT3 Nissan GT-R racecar lost control, catapulted over a barrier and killed a spectator. Initially, the German motorsport association (DMSB) reacted to the incident by introducing speed limits for races, in the hope of avoiding a repeat of the accident.

However, the custodians of the 'Ring, Capricorn Nürburgring GmbH, have decided to extend these speed limits to non-racing events. That includes regular 'Touristenfart' days.

This is a potentially disastrous move for the circuit and the local area. Will the formidable reputation of the 'Ring survive? It is known as one of the few tests of driving skill on the planet available to those of us who aren't professional racing drivers. Of course human life is precious, and we should do everything we can to prevent needless accidents. However, motorsport is inherently dangerous and always carries a degree of risk – for both drivers and spectators. What do you think? Have the circuit officials gone too far? Let us know your thoughts on our Facebook page.



NEW CIVIC TYPE R TO STAY TOP OF THE CHARTS?

IN LIGHT OF THE NEWS THAT RECORDING LAP TIMES OF ANY SIGNIFICANCE IS NOW BANNED, DOES THIS MEAN THE CURRENT CROP OF LAP RECORD HOLDERS WILL REMAIN THAT WAY FOREVER? IF SO, IT'S EXTREMELY LUCKY TIMING FOR HONDA, WHO FOCUSED THEIR ENTIRE MARKETING STRATEGY FOR THEIR NEW CIVIC TYPE R AROUND IT BEING THE FASTEST FRONT-WHEEL DRIVE PRODUCTION CAR AT THE GREEN HELL. A PRE-PRODUCTION VERSION OF THE NEW TYPE-R (WITH SPEC REPRESENTATIVE OF THE ROAD CAR, ON THE SAME TYRES, ETC.) COMPLETED A FULL LAP IN 7MINS 50.63S IN MARCH, EARLIER THIS YEAR. A TIME THAT WILL NOW STAND AS THE FASTEST FWD PRODUCTION CAR LAP RECORD INDEFINITELY.



NEW 45TH ANNIVERSARY GT-R

There is a new GT-R on the roads. Well, only five official ones to be exact in the UK of the total 100 being produced worldwide. It's a special edition Nissan GT-R, built to celebrate the 45th birthday of the most devastating three letters in performance motoring. Based on the 2015 GT-R, every one will be painted Champagne Gold, the same colour as the Skyline R34 GT-R M-Spec released in 2001. Each car will have a Premium Black interior with a special plaque on the lower part of the centre console, while another 45th Anniversary plate will be located in the engine compartment. If you fancy one of the five you need to act now. They'll each cost £79,780 on the road.

NEW JUKE-R... WITH ADDED NISMO

The first Nissan Juke-R was bonkers. They basically stuffed the 3.8-litre twin-turbo V6 engine and 4WD running gear from an R35 GT-R into a Juke, creating the world's first supercar crossover. Now they're at it again, but this time they're using the latest technology, styling and running gear from the NISMO catalogue of high-performance products. So it will be like a tuned version of the Juke-R. The crossover that was already capable of beating up supercars, as the various online videos proved. The unveil is set to take place at Goodwood on the 25th June, which is just after we go to print and before you get to read this. So we'll give you an update on the car next month. We don't know what they're putting in their lunches at Nissan these days, but we want some. Keep it coming, please, Nissan and Nismo. We like it. A lot!



EVENT PREVIEW

SUNDAY 19TH JULY TRAX SILVERSTONE WWW.TRAXSHOWS.CO.UK

A long-standing part of the aftermarket community, Trax is traditionally the show that brings the curtain down on car shows for the year. However, it's a bit earlier this year, which should mean better weather. Hurrah! It's a relatively common format; club stands, a show 'n' shine competition, etc. However, because the show has been around so long, it tends to attract some of the best cars. Of course, being able to drive your own car on a genuine F1 circuit during the day, in front of the huge crowds, is an exciting prospect, too. Check it out!

SATURDAY 8TH & SUNDAY 9TH AUGUST KING OF EUROPE WWW.KINGOFEUROPE.NET

Featuring our very own Baggsy, King of Europe pitches the best drivers from around the continent together at one event. Lydden Hill is set to host Round 4 of the Pro Championship in August. The cars and drivers in this series are of a really high standard, and the challenging Paddock Bend is a favourite with drifters from across the continent. Well worth checking out if you want to see how the very best take on the hill.

www.kingofeurope.net



PHOTO CREDIT:
DAN FEGENT

PHOTO CREDIT: RICH
SAMS PHOTOGRAPHY



SVA IMPORTS WILL COMPETE IN WORLD TIME ATTACK!

Kent-based SVA Imports will be flying the flag for the UK at the 2015 World Time Attack Challenge in Australia. Fresh from destroying the Time Attack lap records at both Snetterton and Brands Hatch recently, driver Gareth Lloyd and the team are set to take on the best in the world, in their own back yard.

They're at a huge disadvantage considering the combination of Australian and Japanese teams in particular, that have years of knowledge of the track, so they have all the data and setup advantages. However, SVA have been working away to improve their car. There's a brand new suspension setup being developed on a jig by experts Nitron, and the car is slowly changing shape thanks to a whole load of aero. At Brands Hatch on 21st July, the new front aero made an appearance and immediately helped driver Gareth set a blistering 45.043 lap, even without using all the toys available to him. That's faster than the BTCC, NASCAR and British Superbike lap records!

We wish them luck and look forward to seeing how they get on at Sydney Motorsport Park on the 16th and 17th of October. Go get 'em guys! You can do it!

DATES FOR YOUR DIARY

WHAT, WHERE AND WHEN...

JULY

15TH - TRACKDAY, BRANDS HATCH INDY, WWW.MSVTRACKDAYS.COM
15TH - TRACKDAY, SNETTERTON 300, WWW.MSVTRACKDAYS.COM
15TH - SUMMER WEDNESDAYS TRACK EVENING, SNETTERTON, WWW.MSVTRACKDAYS.COM
17TH - TRACKDAY, OULTON PARK, WWW.MSVTRACKDAYS.COM
17TH - TRACK EVENING, DONINGTON PARK, WWW.JAVELINTRACKDAYS.CO.UK
18TH - TRACKDAY, DONINGTON PARK, WWW.JAVELINTRACKDAYS.CO.UK
18TH - TRACKDAY, LYDDEN HILL, WWW.LYDDENHILL.CO.UK
18TH/19TH - ET BRACKET GAMBLERS TRACK WEEKEND, SHAKESPEARE COUNTY RACEWAY, WWW.SHAKESPEARECOUNTYTRACEWAY.COM
19TH - TRAX, SILVERSTONE, WWW.TRAXSHOWS.CO.UK
19TH - TRACKDAY, BLYTON PARK, WWW.JAVELINTRACKDAYS.CO.UK
20TH - TRACKDAY, SNETTERTON 300, WWW.MSVTRACKDAYS.COM
20TH - TRACKDAY, BEDFORD AUTODROME GT, WWW.MSVTRACKDAYS.COM
22ND - TRACKDAY, MALLORY PARK,

WWW.JAVELINTRACKDAYS.CO.UK
22ND - NOVICE ONLY TRACKDAY, OULTON PARK, WWW.MSVTRACKDAYS.COM
22ND - TRACKDAY, SNETTERTON 300, WWW.OPENTRACK.CO.UK
23RD - TRACK EVENING, BRANDS HATCH INDY, WWW.OPENTRACK.CO.UK
24TH - BURTON POWER TRACKDAY, OULTON PARK, WWW.MSVTRACKDAYS.COM
25TH - TRACKDAY, BEDFORD AUTODROME, WWW.JAVELINTRACKDAYS.CO.UK
25TH - MLR SPRINT SERIES RD.4, TEESIDE AUTODROME, WWW.LANCERREGISTER.COM
25TH - TRACKDAY, CROFT, WWW.JAVELINTRACKDAYS.CO.UK
26TH - TRACKDAY, CROFT, WWW.JAVELINTRACKDAYS.CO.UK
27TH - TRACKDAY, CADWELL PARK, WWW.MSVTRACKDAYS.COM
28TH - TRACK EVENING, SNETTERTON 300, WWW.JAVELINTRACKDAYS.CO.UK
28TH - TRACKDAY, BRANDS HATCH INDY, WWW.MSVTRACKDAYS.COM
28TH - TRACK EVENING, BRANDS HATCH INDY, WWW.MSVTRACKDAYS.COM
29TH - TRACKDAY SESSIONS, BRANDS HATCH GRAND PRIX,

WWW.MSVTRACKDAYS.COM

AUGUST

1ST - TRACKDAY, BEDFORD AUTODROME SEN, WWW.MSVTRACKDAYS.COM
1ST - HOW FAST? EVENT, BEDFORD AUTODROME WEST, WWW.HOWFAST.CO.UK
1ST/2ND - ULTIMATE STREET CAR, SANTA POD, WWW.ULTIMATESTREETCAR.CO.UK
2ND - TRACKDAY, BLYTON PARK, WWW.JAVELINTRACKDAYS.CO.UK
3RD - TRACKDAY, SNETTERTON 300, WWW.MSVTRACKDAYS.COM
3RD - TRACKDAY, CASTLE COMBE, WWW.OPENTRACK.CO.UK
4TH - TRACK EVENING, DONINGTON PARK, WWW.JAVELINTRACKDAYS.CO.UK
4TH - TRACKDAY, OULTON PARK, WWW.MSVTRACKDAYS.COM
5TH - TRACK EVENING, CADWELL PARK, WWW.JAVELINTRACKDAYS.CO.UK
5TH - TRACKDAY, BRANDS HATCH INDY, WWW.MSVTRACKDAYS.COM
5TH - TRACK EVENING, BRANDS HATCH INDY, WWW.MSVTRACKDAYS.COM
6TH/9TH - 28TH BULLDOG BASH, SHAKESPEARE COUNTY RACEWAY,

WWW.SHAKESPEARECOUNTYTRACEWAY.COM

8TH - SATURDAY NIGHT SPECIAL RWYB, SANTA POD, WWW.RWYB.CO.UK
8TH/9TH - KING OF EUROPE PRO RD.4, LYDDEN HILL, WWW.KINGOFEUROPE.NET
9TH - TRACKDAY, WOODBRIDGE, WWW.JAVELINTRACKDAYS.CO.UK
9TH - RUN WHAT YA BRUNG, SANTA POD, WWW.RWYB.CO.UK
11TH - TRACKDAY, BRANDS HATCH INDY, WWW.MSVTRACKDAYS.COM
11TH - TRACK EVENING, BRANDS HATCH INDY, WWW.MSVTRACKDAYS.COM
11TH - TRACKDAY, CADWELL PARK, WWW.MSVTRACKDAYS.COM
11TH - TRACK EVENING, CADWELL PARK, WWW.MSVTRACKDAYS.COM
13TH - TRACK EVENING, SNETTERTON 300, WWW.JAVELINTRACKDAYS.CO.UK
14TH - TRACKDAY, SNETTERTON 300, WWW.MSVTRACKDAYS.COM
15TH - RUN WHAT YA BRUNG, SANTA POD, WWW.RWYB.CO.UK
15TH - MLR SPRINT SERIES RD.5, BLYTON PARK, WWW.LANCERREGISTER.COM
15TH - TRACKDAY, LYDDEN HILL, WWW.LYDDENHILL.CO.UK

competition CLUTCH

© 2015 Competition Clutch. All Rights Reserved



TEAM
ENGLISH RACING

Lucas English | Mitsubishi EVO X



Mitsubishi EVO

Whether you are a weekend warrior in need of a Stage 2 or a Pro Driver in need of a Triple Disc clutch...

Competition Clutch has got you covered!

Stage 2 • Stage 3
Stage 4 • Flywheels

Twin Discs
Triple Discs

For more information and a dealer near you, call or visit our website!



#competitionclutch
CONNECT WITH US!

WWW.COMPETITIONCLUTCH.CO.UK

CALL NOW 01327 226134

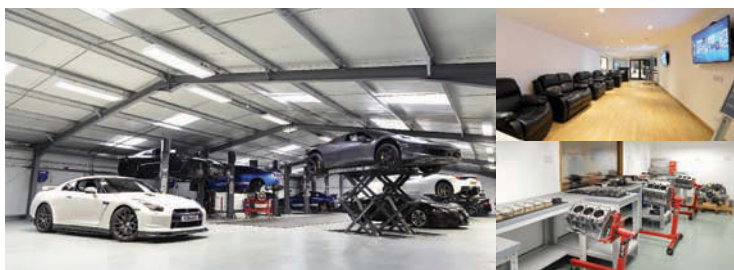
sales@competitionclutch.co.uk



LITCHFIELD UNVEILS NEW SUPERCAR CENTRE

After 18 months of design and building work, Gloucestershire super-tuner Litchfield's new tuning and service facility is ready to go. A clinically-prepared 20,000 square feet of workshop, dyno and preparation space they claim sets new standards in the automotive aftermarket. Looking at the pics, it's difficult to argue. The key thing with Litchfield's new setup is it allows them to do everything under one roof; tuning, servicing, bodywork, bespoke interior re-trims, dyno work, it's all available on one site! It features 16 'flat access' ramps, a 19-strong technical team and a list of available upgrades from the likes of Akrapovic, Alcon and Michelin. They also have a SuperFlow engine dyno and one of Europe's most sophisticated twin-retarder Maha dyno cells. So whether you want an engine built, a car sourced from overseas or your existing car completely revamped, Litchfield can deliver.

www.litchfieldmotors.co.uk



NEW DYNO ROOM AT DYNOTECH

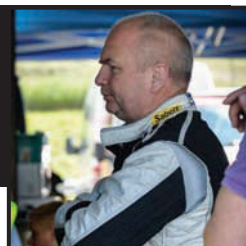
Mitsubishi Evo specialists Hayes Dynotech have a new dyno room and it features a really cool party trick. The new soundproofed room features spongy floor tiles and Perspex windows, with large screens linked to the Dyno Dynamics 2WD and 4WD capable rolling road. Across the workshop is owner Bob Hayes' office with a waiting area that has two screens, one of which is linked to the Dyno readout, so customers can watch what's going on in real time. However, the real party piece is the large fan assembly. Having taken a huge fan from a hovercraft, Dynotech have linked it up to a multi-speed controller for variable airflow during mapping and testing. Best of all, it's mounted to a huge metal frame that is electrically winched up into and through the roof. How trick is that? The new dyno cell has purposely been built with shallow ramps, so it can accommodate really low cars, too. Definitely worth checking out, especially if you're a Lancer Evo owner in the South East or London area.

www.hayesdynotech.co.uk



5 MINUTES WITH...

TOM GANNON TGM SPORT



Q. HI, WHO ARE YOU AND WHAT DO YOU DO?

A. HELLO. MY NAME IS TOM GANNON AND I AM THE PROUD OWNER OF TGM SPORT

Q. WHAT PRODUCTS OR SERVICES DO YOU OFFER TO CUSTOMERS AT TGM SPORT?

A. WE OFFER EVERYTHING FROM SERVICING TO FULL RACECAR BUILDS. WE ARE A FAMILY-RUN BUSINESS WITH A LOYAL CUSTOMER BASE AND WE BELIEVE IN DOING A JOB RIGHT FIRST TIME. WE HAVE A RANGE OF MODERN EQUIPMENT AND A TEAM OF MOTIVATED AND TALENTED TECHNICIANS. IN ADDITION TO THE MECHANICAL WORK, WE HAVE AN ON-SITE BODYSHOP THAT IS OFTEN FILLED WITH CARS FROM GP2, GP3 AND FORMULA E

Q. THAT'S IMPRESSIVE! WHERE IN THE COUNTRY ARE YOU, AND HOW DID TGM SPORT BEGIN?

A. I STARTED THE COMPANY WITH MY BROTHER WILL IN 2001. TGM SPORT IS BASED IN FLEET, HAMPSHIRE, ALTHOUGH WILL AND I ARE ORIGINALLY FROM RICHMOND, NORTH YORKSHIRE. WE HAVE ALWAYS WORKED ON CARS FROM A YOUNG AGE, AND WE BOTH LOVE RACING. SO IT WASN'T A CASE OF WHETHER WE WOULD START A COMPANY LIKE THIS, BUT WHEN

Q. DO YOU SPECIALISE IN ANY SPECIFIC MAKES OR MODELS AT TGM SPORT?

A. HONDAS ARE OUR SPECIALITY, WE RUN THEM AS RACE CARS OURSELVES. HOWEVER, WE CARRY OUT SERVICING AND PERFORMANCE UPGRADES ON ALL TYPES OF VEHICLES. WE'VE EVEN PAINTED THE SKELETON PANS AND BOBSLEDS FOR THE TEAM GB OLYMPIC TEAM!

Q. WHAT ARE YOU WORKING ON RIGHT NOW?

A. AT THE MOMENT WE HAVE A DC5 INTEGRA AND AN EP3 CIVIC IN OUR WORKSHOP WE'RE FIXING THE DC5 AND CARRYING OUT A THOROUGH SERVICE ON THE EP3. IN THE BODYSHOP WE HAVE A GP2 CAR AND A FORMULA RENAULT. WE ARE ALSO WORKING ON OUR FD2 RACECAR AT THE MOMENT, PREPARING IT FOR AN UPCOMING RACE WEEKEND

Q. SO YOU'RE HEAVILY INVOLVED IN MOTORSPORT AS WELL AS THE WORK YOU DO ON ROAD CARS?

A. ABSOLUTELY. WE'RE PARTICULARLY KEEN ON ENDURANCE RACING. IT'S ARGUABLY THE BIGGEST TEST OF MAN AND MACHINE, AND FROM A COMPANY VIEWPOINT IS A GOOD TEST OF OUR SKILLS. TO WIN YOU HAVE TO BE QUICK, BUT YOU ALSO HAVE TO FINISH. WE HAVE AN FN2 CIVIC WE'RE DEVELOPING FOR SHORTER SPRINT RACES, AND WE HAVE A HEAVILY-MODIFIED FD2 CIVIC THAT WE ARE CURRENTLY DRIVING IN THE INTERNATIONAL ENDURANCE SERIES. OUR NEXT RACE IS AT PAUL RICARD IN FRANCE ON THE 11TH AND 12TH OF JULY

Q. CAN YOU BRIEFLY TELL US A BIT MORE ABOUT THE FD2?

A. SURE, IT HAS A 2.0-LITRE K-SERIES ENGINE, SEQUENTIAL GEARBOX WITH FLAT-SHIFT, NITRON 3-WAY ADJUSTABLE SUSPENSION, 4-POT CALIPERS ALL ROUND WITH BREMBO 355MM FLOATING DISCS UP FRONT, AIR-JACKS, WIDE-ARCH BODYWORK, 9IN WIDE WHEELS AND SLICKS, ETC. IF YOU THINK A ROAD-SPEC CIVIC TYPE R IS FAST, THEN YOU WOULD BE AMAZED AT WHAT THIS CAR CAN DO. OUR COMPETITORS OFTEN ARE!

Q. HOW DO YOU THINK THE TUNING INDUSTRY HAS CHANGED IN THE LAST FEW YEARS?

A. I'M NOT ENTIRELY SURE IT HAS, TO BE HONEST. ONE THING WE ARE NOTICING IS THAT CUSTOMERS ARE BECOMING MORE INFORMED ABOUT THEIR MODIFICATIONS. PEOPLE ARE READING UP ABOUT THE EFFECT OF DIFFERENT PARTS IN BOOKS AND ONLINE, BEFORE COMING TO US FOR HELP. SOMETIMES THAT CAN BE TRICKY, ESPECIALLY IF THEY HAVE RECEIVED SOME POOR ADVICE ON AN INTERNET FORUM, FOR EXAMPLE. HOWEVER, IT'S GENERALLY A GOOD THING AS PEOPLE ARE REALISING THE IMPORTANCE OF CAR SETUP; ADJUSTING THE SUSPENSION CORRECTLY, CHOOSING THE RIGHT TYRES WITH THE RIGHT PRESSURES FOR THE SITUATION, RATHER THAN JUST THROWING LOTS OF PARTS AT IT

Q. GOOD POINT. SO WHAT DOES THE FUTURE HOLD FOR YOU AND TGM SPORT AS A BUSINESS?

A. LOTS OF TROPHIES, HOPEFULLY! WE'RE DEFINITELY DRIVEN BY MOTORSPORT AND WE LIKE TO BE SUCCESSFUL. WE'LL CONTINUE TO PUT OURSELVES OUT THERE AGAINST OUR COMPETITION, IT'S THE ULTIMATE TEST OF BOTH SPEED AND RELIABILITY. IN TERMS OF THE BUSINESS, WE'LL CONTINUE TO BE A PASSIONATE, FAMILY-RUN BUSINESS THAT EARNS ITS REPUTATION THROUGH RESULTS. WE'RE HAPPY WITH THAT

THANKS FOR YOUR TIME TOM, IT'S APPRECIATED

WWW.TGMSPORT.CO.UK

BUILT FOR THE SPRINT



PROXES

With their advanced technology and unique tread designs, Proxes tyres make sense of your car's power. Superior performance and handling for cars or SUVs.

For your local Toyo dealer visit www.toyo.co.uk/dealer
www.toyo.co.uk | facebook.com/ToyoTyreUK

TOYO TIRES
driven to perform

 **th ANNIVERSARY**

DON'T **HATE** ME 'COS I'M *pretty*

JON LIVERMORE GETS STICK FOR HIS 702BHP EVO SPENDING MORE TIME ON THE SHOW CIRCUIT THAN IT DOES ON THE TRACK, BUT THAT HASN'T STOPPED HIM BRINGING HOME THE SILVERWARE. JUST NOT FROM THE KIND OF COMPETITION YOU MIGHT EXPECT...

WORDS: DAN SHERWOOD PICS: NICK WILLIAMS

If you think owners of highly tuned Evos should spend more time ragging the nuts off their cars round race tracks of a weekend than polishing its paintwork to perfection, then maybe you should look away now. You see, even though the car you see before you on these pages is packing a stroked and forged 2.2-litre race engine making a tyre torturing 702bhp and is covered from bonnet to boot in the finest lightweight carbon-fibre panels, you're more likely to see it sitting on a red carpet than you are flying around a circuit. Not because it can't. Just because its owner has been there, done that, and now gets his kicks from building the car into his own idea of Evo perfection and contesting in a very different, yet just as spirited, form of automotive competition.

'It sounds terrible, I know. And I almost cringe a little bit when I say it, but I don't enter show 'n' shine competitions to come second – I go there to win,'

explains the Evo's fastidious owner, Jon Livermore. 'I've spent countless hours on the car, building it to my exacting standards and yet more countless hours cleaning and detailing it, so that it looks better than when it rolled off the production line. Not to mention the tens of thousands of pounds that the car has cost me over the years to get it to this spec. So sure, I have a lot of pride in the car and I like to think it can hold its own in any show 'n' shine competition in the country, or even in Europe, where I've also shown the car and came away with silverware for my efforts.'

Some may scoff at the thought of worrying about the outcome of a 'polishing contest', where cars enter the arena on low-loader trailers and spend their days when not in competition in hyperbaric 'carcoon' bubbles, but they'd be sorely missing the point. Show 'n' shine can be an extremely competitive pastime, in some cases with serious prizes at stake, so why shouldn't someone be in it







to win it? After all, if you spoke to a racing driver who was entered into a race, they wouldn't tell you they were simply there for a Sunday drive, they'd say they wanted to be at the top step of the podium. There's nothing big-headed or pretentious about it, it's just the nature of competition – everyone wants to win. It's just that those with the most passion and dedication to their chosen field tend to be in a better position to achieve that than others.

But don't go thinking that Jon's Evo falls into the category of a chequebook build, where the owner drops off the car to a tuner with a bundle of cash and picks it up weeks later ready to take home the trophies. No, Jon's car exists through the hard graft of his and his mates own

fair hands from the confines of a draughty shed at the bottom of Jon's garden. Yes, the monster engine was built by expert race engine builder Tim Radley through Evo specialists Indigo GT, but the rest of the car, including the removal of the factory roof to be replaced by a lightweight single skin carbon item, was completed in the shed by Jon and his band of merry modifying men... in the middle of a blisteringly cold winter... while Jon himself was battling with the effects of a course of intense chemotherapy to fight off a severe stage three Lymphoma cancer. Now that's dedication!

'I got diagnosed with the condition when I was halfway through building the car,' says the 34-year-old Evo fan. 'I was in pretty bad shape and the

doctors said if I didn't start treatment within the month, I wouldn't make it. As it was, there were still no guarantees...'

Now, in some cases, getting diagnosed with a life threatening illness can make you seriously evaluate your life. To see what's most important and focus solely on the process of healing and recuperation. 'Yeah, I was gutted and worried about my health, my life. But I was also worried that the car wouldn't be ready for Japfest!' Jon laughs. 'I was determined not to let my illness stop me from doing what I loved and building the car of my dreams. In fact, it put that goal into overdrive, as I couldn't be sure that I'd even be around long enough to see it through to the end.'

So rather than shelve the

project, with the help of his mates, especially when he himself was too weak to contribute with elbow grease of his own, Jon's turned the Evo's tuning up to eleven.

'The car became a real focal point for me throughout my treatment,' Jon explains. 'Along with the amazing support from my mum, it was the thing that really pulled me through the hardest times. I owe my life to that car as, seeing it 'finished' was what kept me going and I poured every ounce of effort I had, plus all my savings, into making it into the best car I could.'

The Evo had already been graced with a host of carbon panels – Jon is the MD of carbon-fibre specialists Daibutsu-R, which helps! – a full

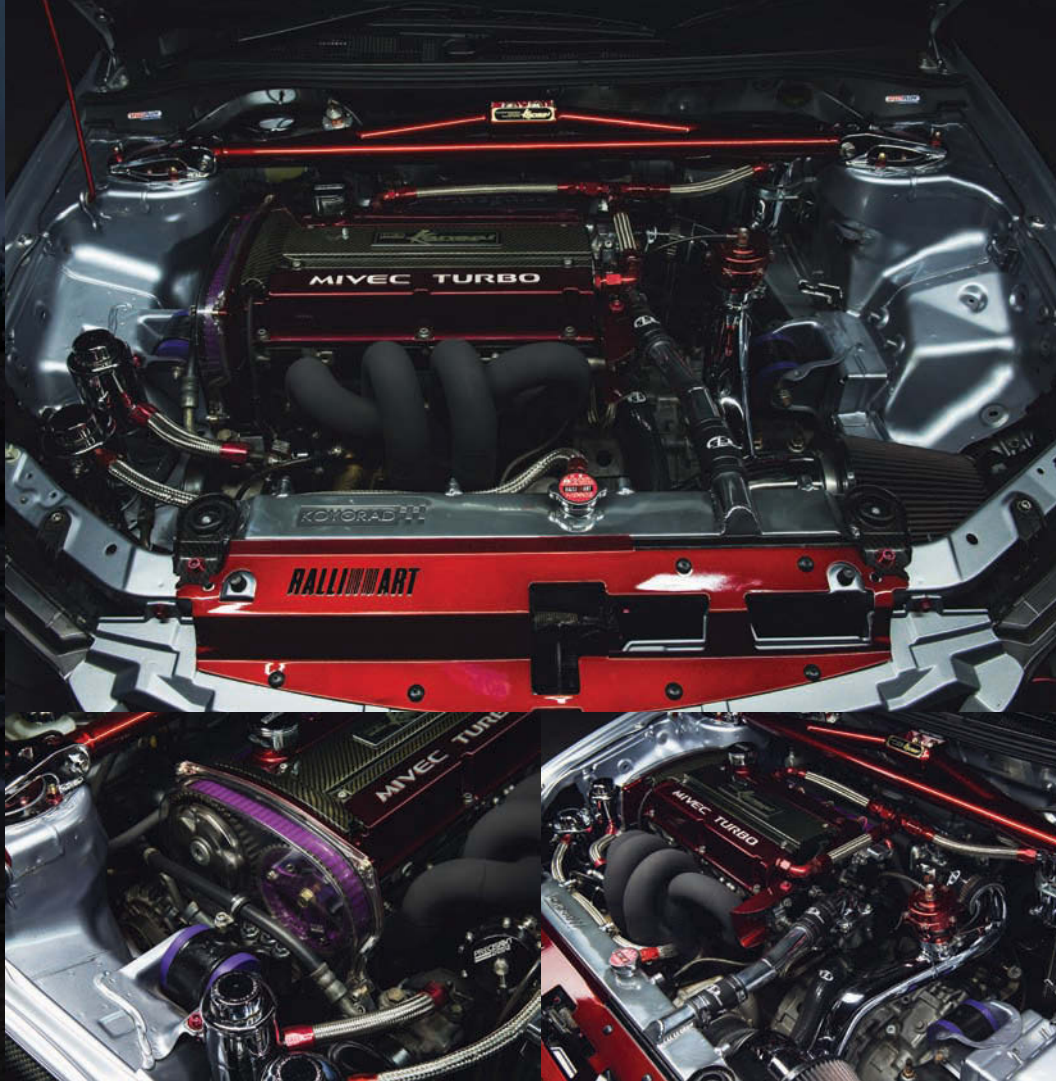


THANKS
 THANKS TO ALL THE PEOPLE
 WHO HELPED ME BUILD THE CAR
 - THE BOYS FROM SCENE DAILY,
 LANCE HAND, TOM ANDREWS,
 MATT HAWKINS, LUKE BEAN
 JONES, MATT DAILY AND JAMES
 BONGA WILLIAMS; JASON AND
 CARMEN BYRNE AT CLB
 VALETING FOR ALL THE HELP
 OVER THE YEARS; SIMON
 MISKELLY FOR ALL HIS SUPPORT;
 ADAM AND THE COBRA TEAM;
 PETE FROM SPEC-R; JAY DAVEY
 AT BLACK ICE. AND ESPECIALLY
 MY MUM, WITHOUT HER
 UNWAVERING SUPPORT, I
 WOULDN'T BE HERE NOW

TRANSMISSION RE-VAMP
 JON'S OWNED THE EVO SINCE
 2006 AND, BACK IN THE DAYS
 BEFORE HE WAS INTO THE
 SHOW SCENE, THE EVO HAD A
 HARD LIFE OF ABUSE AS IT
 HAD ITS ARSE KICKED AT
 EVERY OPPORTUNITY AT THE
 WHIM OF JON'S LEAD FOOT.
 HOWEVER, IT WAS AFTER ONE
 SUCH OUTING THAT THE REAR
 DIFF GAVE UP THE GHOST
 AND DESTROYED THE REAR
 END. TO ENSURE SUCH A
 CATASTROPHIC FAILURE NEVER
 HAPPENED AGAIN, JON HAS
 INSTALLED THE BEEFIER DIFF
 UPGRADE FROM AN IMPORT
 ONLY RS MODEL.

complement of adjustable
 suspension arms and enough
 carnuba wax to sink a
 battleship, so it was looking
 pretty slick as it was, but
 Jon's vision stretched further,
 so the next phase of the
 development began in
 earnest.

'The interior featured
 carbon door cards, tons of
 smaller carbon trim panels
 and the mental Safety
 Devices rollcage, but was still
 rocking the standard seats,
 which just didn't do it for me,'
 Jon laughs. 'To remedy the
 problem I sourced a set of
 awesome carbon-backed
 Cobra Misano recliners in
 carbon leather and custom
 stitching. They suit the build
 perfectly and are just the best
 seats I've ever sat in.'



'A 702BHP RACE ENGINE LURKS UNDER THE CARBON BONNET'





'IT'S BEEN BUILT AS A FULL-ON RACER – I JUST DON'T RACE IT'



By this point in the build, and also due to his health issues, the days of Jon blasting the Evo through the Welsh countryside were long behind him, but that didn't mean that he could take it easy when it came to sorting the engine. Even though he had no plans to be tearing up the Tarmac in the car, he wanted it to be as capable, if not more capable in outright performance terms, as any other Evo build out there, whether it be show based or track-tuned.

'I'd always wanted 500bhp

from the motor, but after speaking to Antony at specialist Evo tuners Indigo GT, those plans were soon scrapped and a full race spec 1000bhp-capable build was specified in its place,' Jon grins. 'We knew from the offset that the project was going to be huge so, although Indigo undertake engine builds in-house, it was decided that specialist race engine builder Tim Radley at Race Developments would be the spanner man on the motor and also complete all the extensive

work that was needed on the cylinder head.'

The engine's transformation was extreme to say the least and centred around a stroker kit with billet crank, Oliver billet rods and CP pistons to increase displacement to 2.2-litres. The head was also treated to extensive porting and polishing, a set of Kelford 272 cams and the whole valvetrain was overhauled with uprated parts. A huge Precision 6266 turbo was then fitted along with a TIAL external wastegate and blow-off

valve and an AMS intercooler. Breathing mods for the monster build were taken care of by a K&N induction kit and Magnus intake in the induction side and a 3in Blitz Nur Spec stainless steel system does it job on the exhaust side. The fuelling has obviously also been heavily uprated with a custom boot-mounted fuel system with Sytec fuel pump and swirl pot before mapping with a Link Race ECU to get everything working at its optimum.

'Although the motor is built to



take four figures, we've kept it detuned to just 702bhp with 590lb ft of torque,' laughs Jon. 'But if I ever wanted to, that extreme level of power is only a remap and bigger turbo away.'

While the Evo's lump was being breathed on, Jon transported the car back to his shed, where another cold winter of work would begin.

'Around this point, I was far too ill to do much on the car and my mates really stepped up and got stuck in for me,' Jon recalls. 'They spent long nights sanding

the engine bay and re-painting it so it would be ready for the new powerplant to be put back in when the car returned to Indigo.'

But even with his energy levels dangerously depleted by the chemo, Jon couldn't miss out on doing the most nerve-racking part of the build – the carbon roof, which involved cutting out the Evo's original metal roof with a powersaw, before bonding the new carbon one in place.

'Cutting the roof out was pretty scary at the time,' Jon

chuckles. 'And the removed panel still hangs in my shed as a memento of that moment!'

With the chassis prep completed, Jon took the Evo back up to Indigo for the engine to be installed. At the same time, a set of Ohlins DFV coilovers were installed along with an Alcon big brake kit at the rear to match the one that was already hiding behind the front wheels.

'We also fitted just about every component from the Whiteline catalogue to the underside of the car, too,

along with a host of chromed and polished parts, many of which you can't even see!' Jon highlights.

And it's this kind of attention to detail that puts Jon's Evo in a different league to many of the other cars gracing the show 'n' shine paddocks at shows across the country. The car hasn't been built to simply 'look' good, or to pander to the judge's scorecards, it's been built to be the best Evo it can be, whether that's dropped on its 9.5x18in hyper silver Volk Racing CE28

TECHSPEC

ENGINE

2.0-litre, 4-cyl, 16v 4G63 Mivec engine with stroker kit to increase displacement to 2.2-litres, full performance black Zircotec manifold, elbow and downpipe, Precision 6266 turbo with hot side in Zircotec black, Oliver extreme billet rod set, billet crank, CP 85.5mm pistons, Supertech dual valve spring kit, intake valve sets, Ferrea valve guides and collets, TIAL F38 wastegate and BOV, new OEM oil pump, Fluidamper, Race Developments cylinder head, HKS gasket kit, Zircotec coated exhaust housing, machining and balancing, Evo balance shaft cap and stub, ACL Race Series bearings, ARP main studs, A1 head studs, Kelford 272 cams, HKS cam pulley, Indigo-GT lash adjusters, HKS timing belt, ARP manifold stud kit, 3in downpipe, 4in K&N filter, Magnus black intake, chromed auxiliary tanks, thermostat housing, sensors, intake and intercooler pipework, custom boot-mounted fuel system with Sytec fuel pump and swirl pot, 3in Blitz Nur-Spec exhaust, Koyo radiator, AMS Race intercooler, braided Hel turbo oil and boost lines, HKS Kansai carbon plug cover, Zaklee clear cam cover, Battery relocated to boot, Spec-R custom chrome tanks, carbon dipped rocker cover, Ralliart cooling plate, radiator cap and thermostat, Super Pro engine mount and gearbox bushes, Blox engine mount kit, Tomei piston oil cap, LINK ECU with anti-lag, launch control and switchable maps

TRANSMISSION

Factory 6-speed manual gearbox, RS diff conversion with RS propshaft

SUSPENSION

Air Lift Performance series with v2 management, Whiteline roll-centre kit, Whiteline adjustable front drop-links, Whiteline front and rear anti-roll bars, custom rear camber arms, race-spec rear toe arms, HKS Kansai struts front and rear, polybushed all round

BRAKES

EVO X FQ400 365mm discs with Alcon calipers and XP8 pads (front & rear), ABS delete and servo delete full racing brake setup, HEL braided brake lines, OBP in-car brake bias valve

WHEELS & TYRES

9.5x18in ET20 Volk Racing CE28 alloys with Goodyear Eagle F1 tyres

EXTERIOR

USDm rear lights, custom headlight intake, APR front under splitter, full carbon roof, Daibutsu-R vortex generator, carbon wings, carbon front and rear doors, carbon bonnet, carbon boot, carbon side skirts, carbon side spats and carbon diffuser, APR carbon wing mirrors, Voltex carbon exhaust surround, Ralliart front splitter, Rexpeed side spats

INTERIOR

Daibutsu-R dry carbon interior parts with single coat lacquer – door cards front and rear, A,B,C,D pillars, front and rear kick plates and parcel shelf, Rexpeed carbon steering wheel cover, speedo surround and arm rest cover, Ralliart pedals, carbon gear surround and window switches, custom roof lining, Blitz turbo timer, A'PEXi AVCR, AMS gearknob, Coltspeed carbon gauge and stereo pod, Cobra Misano carbon-backed bucket seats with custom stitching on carbon leather, full Safety Devices rollcage, Takata 4-point harnesses, OMP harness cutter, Audi R8 accessory net




rims as a static display piece or, if he so wished, with the suspension settings and engine map readjusted, to take on many of the current crop of Time Attack contenders. The car can do it all, but Jon only has eyes for one kind of podium, and it's got nothing to do with chequered flags.

'A lot of people in the Evo scene don't like what I've done with the car, especially the stance, but then they don't understand it either. The car is built to the spec of a proper hardcore racer, I just don't race it,' says the polishing perfectionist. 'When I first put the coilovers on and slammed it to

the deck, I got so much stick. It really doesn't bother me though, which is probably why I've gone and installed an Air Lift Performance air ride system now. It's the absolute antithesis of what most people would do with an Evo, but for me it ticks a lot of boxes. Yeah, it doesn't have the outright performance of the coilovers and the ride isn't as comfy, but that's not how I use the car anyway. For me, to be able to easily get the car on and off the trailer to take it to shows, to be able to manoeuvre over speed bumps and then drop it on its arse at a competition is worth much more than a few tenths in lap time around a

circuit.' It's also been worth it for the part the build has played in his recovery from one of the most deadly conditions on the planet. Jon's in remission now, and if it wasn't for his mum, friends and the drive he garnered from pitching his Evo into the white hot heat of the UK's show 'n' shine competitions, he may not be here today.

So the haters can hate if they want to, Jon's not bothered. If it's not your cup of tea, then that's fair enough. But don't just hate it 'cos it's pretty, or you'll be missing out on a seriously special build because you can't see further than the 'show car' label. 



Indigo-GT:

T. +44 (0) 1495 719 720

E. info@indigo-gt.com

W. www.indigo-gt.com



10% off Selected Items!

There are some incredible deals to be had on our website with 10% off some of our most popular products, such as...



Defi Racer Boost Gauge
RRP £136.00 - Our Price £123.12



ETS Intercooler Core Evo 7-9
RRP £495.00 - Our Price £445.50



Cosworth StreetMaster Kit
RRP £499.99 - Our Price £449.99

Custom ECU Remapping

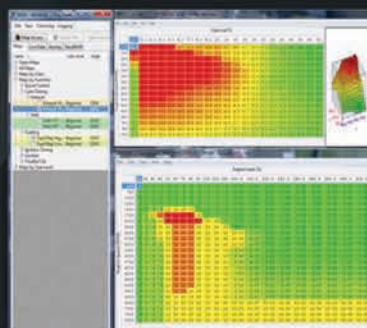
We've put together some fantastic Performance Packages to get the most out of your Evo, all our Packages include Dyno Time and Power Graph Printout.

Evo V-IX

- OpenECU Remap Only - £300 inc VAT
- Walbro 255 Fuel Pump, 3 Port Boost Solenoid & OpenECU Remap - £495 inc VAT

Evo X

- EcuTEK Remap Only - £500 inc VAT (Includes EcuTEK Licence)
- 3 Port Boost Solenoid, Cosworth Intake, Decat & EcuTEK Remap - £1095 inc VAT



Servicing & Maintenance

Our Workshop is Fully Equipped to support all your cars Servicing, Maintenance and Repair Requirements to the manufacturers specification and above.

Evo IV-IX

- 4.5K Service £149 inc VAT 9K Service £199 inc VAT 18K Service £319 inc VAT
- 45K Service £495 inc VAT (+ Plugs)

Evo X

- 10K Service £199 inc VAT 20K Service £349 inc VAT

Can't Get To Us? Nationwide Collection & Delivery Service Available

Evo X Replacement
Timing Chain
Supplied And Fitted
£725 inc VAT

Evo IV-IX Stock
Clutch & Flywheel
Supplied And Fitted
£845 inc VAT



WaxOyl Under
Sealing
£149 inc VAT

Courtesy Car
Available

Waiting Area With
Wi-Fi & Refreshments

SARD

HKS



TAKATA

RAYS

PERFORMANCE
FRICTION
BRAKES

TEINI
High Performance Suspension

AMS
www.amsperformance.com

KELFORD CAMS

WHITELINE
whiteline.com.au

SUPERTECH

TOMEI
The Engine Specialist

KW

Indigo-GT Ltd - Unit 21 Tafarnaubach Ind Est, Tredegar, NP22 3AA



CARBON GOODIES SUB-ZERO CARBON PRODUCTS

Genuine
carbon
fibre



EVO Carbon Roof

Evo 4-6 Full Replacement Carbon Fibre Roof Made In The UK £895.00.

Evo 7-9 Full Replacement Carbon Fibre Roof With MR Ridges Made In The UK £895.00.



SPECIAL INTRODUCTORY OFFER

Evo 5-6 Carbon Fibre Side Skirt
and Rear Bumper Extension
Package £500.00.

Also Evo 5-6 Rear Diffusers:
GRP £295.00.
Carbon Fibre £495.00.

email: sales@carbongoodies.co.uk

Tel: 01226764161 or 07415990088

www.carbongoodies.co.uk

suppliers of...



PEDAL DOWN. PULSE UP.



GIVE YOUR RIGHT FOOT WHAT IT WANTS

with a K&N® performance air intake system. It delivers more horsepower and acceleration—guaranteed—and installs in about 90 minutes. Order online today and put more power right where you want it.

KNFILTERS.COM



SUPERIOR AIRFLOW. SUPERIOR PERFORMANCE.™



**Developed for
the road...**



...proven on the track

SuperPro bushes are tried, tested and proven in motorsport, which means they deliver outstanding performance. Their innovative design and superior materials offer dramatic improvements in handling and give a more precise feel through the corners.

Unlike some polyurethane bushes, with SuperPro products there is no increase in vibration or ride harshness, an attribute that makes them an ideal choice for cars that are used for both normal road driving and track days.

- Precise, communicative and predictable handling
- Consistent suspension geometry
- Long life, low maintenance
- Precision engineered for an exact fit
- Increased tyre and suspension component life
- No increase in vibration and road noise
- Ideal for road, modified and track cars
- Three-year/36,000-mile guarantee

SuperPro manufacture a wide range of bushes and kits to fit most Japanese cars including: **Mitsubishi, Subaru, Toyota, Honda, Nissan, Mazda and Suzuki.**

For further details, a full list of applications and to find your nearest stockist, please visit our website or call: +44 (0)1823 690281

SuperPro bushes are designed
and manufactured by:





EIBACH HONDA MEET 2015

JP WENT STATESIDE TO CHECK OUT THE LATEST TRENDS IN HONDA TUNING AT THE 11TH ANNUAL EIBACH HONDA MEET IN CALIFORNIA

WORDS: EIBACH PICS: VIKTOR BENYI

Eleven years on and arguably the largest Honda event on the planet is still going strong. In fact, the annual Eibach Honda Meet in California is looking better than ever. Originally started in the carpark of the Corona-based Eibach Springs Inc. HQ, the event proved so popular over the years, with such huge attendance from Honda lovers from all over the US rocking up to show their rides, that the event was moved for its 10th-year celebrations last year to Storm

Stadium in Lake Elsinore, California. This year, the numbers were just as strong with over 900 cars on display in the show area, and over 6000 enthusiastic Honda fans pouring in to drool over some of the hottest Hondas on the West Coast.

For 2015, Eibach had the highest number of vehicles pre-register, at over 850, with a further 50+ vehicles that entered on the day. Organisers Ryan Hoegner from Eibach Springs in the US and Matt Rodriguez, of

JP'S HIGHLIGHTS OF THE DAY

1. This first class CRX, whose owner works for Honda Corporate, proved popular with the crowds. At over 20-years-old, with all new mouldings, seals and plastics, it was absolutely immaculate.
2. Drawing in the crowds on the AutoFashion stand was the impressive Rocket Bunny NSX which has been on the circuit since it debuted at SEMA. The car still looks as fresh and mind-bendingly wild today as it did then.
3. David Chik is the one and only original owner of this impeccable second generation Integra, which he purchased back in the early 1990s. Absolutely flawless both inside and out, it has an ITR engine swap, Mugen side skirts, and a JDP front lip.
4. Go Tuning, the US authorised dealers for Spoon Sports, had an eye-catching stand with their turbo Time Attack FD2 running on Advan GT wheels, plus their incredible NSX demo car.
5. With the sun shining, people smiling and a range of Hondas that is quite simply breathtaking, Ryan and Matt have created an event that is surely the yearly event for true US (and a select few worldwide!) Honda fanatics.
6. A rare treat was the presence of the RCG Mugen Integra build. Now in semi-retirement, this was perhaps one of its last appearances







'Honda Tuning' fame, highlighted that: 'it was also the smoothest roll-in that we have ever experienced'. With plenty of visitors from the surrounding states such as Washington, Arizona and Nevada, and from further away such as Texas, Maryland, Idaho and New York. However,


even owners who travelled from the Big Apple and Florida to attend paled against the winner of the furthest travelled prize, which went to go to a group from the UK and Germany, followed by another group all the way from Japan! A fine example of dedication to the brand and true

Hondaheads!

Falken Tires sponsored the day and with a further 25 quality vendors including Meguiar's, Spoon Sports and Wilwood brakes, along with 6000 enthusiasts keen to part with their hard earned cash to snap up the show specials, it was a great success all round.

The Falken Tire stand had no less than 10 cars on display in front of their 18-wheeler truck! The Eibach stand was also inundated all day, especially since the Honda Meet was used as a showcase for their new range of T-shirts and caps. These sold out within the first few hours and the Eibach

logo was spotted throughout the show for the rest of the day!

With a sea of Hondas as far as the eye could see, from mouth-watering Civics to show stopping Integras and everything in between, the show was not only packed with quality but quantity, meaning comfy shoes were a must! 



This substantial prize allows you to choose from (where appropriate) Eibach's vast range of award winning products, be it Pro-kit or Sportline springs, coilovers, wheel spacers, anti-roll bars or alignment products enabling you to alter ride heights, improve image, increase tyre life, and above all, seriously sort your chassis! Eibach are world renowned for their quality products supplying not only their legendary race springs to top flight race series and teams, but can be found as standard parts on sexy road vehicles such as the Ford GT, Maserati, Ferrari.

For a chance to win this remarkable prize all you need to do is correctly answer the question (right) and specify your car along with any modifications you already have fitted.

Four black metal springs of different sizes and orientations are shown against a white background. One is a small vertical spring on the left, another is a slightly taller vertical spring next to it. In the foreground, two larger springs are lying horizontally, one slightly behind the other.

- SEND YOUR ANSWER WITH
YOUR NAME, ADDRESS AND
CONTACT NUMBER, ALONG
WITH DETAILS OF YOUR
VEHICLE, TO:
INFO@EIBACH.CO.UK**

GOOD LUCK!



It is a condition of entry that the fitting must be carried out by mutual arrangement and agreement between the prize winner and the staff of Torque Developments International, Eibach UK and *Japanese Performance*, at the workshops of Torque Developments International, Thurrock, Essex, where the fitting will be photographed for a full article, to appear in a later edition of the magazine. The vehicle should have no other mechanical issues needing attention and the winner must be prepared to travel there at their own expense and make sufficient time for the fitting and photography. The winner will be advised to ensure that their insurance will adequately cover the modification. Any extra work over and above the fitting will have to be paid for by the winner. Torque Developments International are responsible solely for the parts fitting, Eibach UK is responsible for any parts warranties. Please indicate if you are not happy to receive further information from either *Japanese Performance* or Eibach UK.



THE BHP PERFORMANCE SHOW 2015

LYDDEN HILL WAS BUZZING AS THE BHP PERFORMANCE SHOW ROLLED INTO TOWN FOR ITS ANNUAL ASSAULT ON THE KENT-BASED CIRCUIT

WORDS & PICS: DAN SHERWOOD

After last year's event saw seemingly-endless queues of patiently-waiting punters sitting in traffic to enter Lydden Hill for hours on end, we were making our way to the Kent-based circuit with equal amounts of excitement and trepidation as to what might befall us as we neared the gate. However, as we blasted along the A2 and approached the venue at around 9am, we were shocked at the complete

lack of queue at all! So, after a frantic diary check to ensure we'd reached the circuit on the right day, we breezed through the gates and were parked up ready to go in minutes! It seems that, not wanting to be caught up at the gates, the majority of owners displaying their collective polished pride and joy got the jump on the venue and got the queueing out of the way early doors. In fact, some eager beavers

were even sat at the gates from as early as 5am! But whatever the cause or reason, the resultant lack of tailback to get in was extremely welcome and ensured a positive start to the proceedings, especially as the sun was also on fine form and played its part to produce a blinder of a day.

Lydden Hill is a venue that benefits from being laid out around the sides of a giant natural bowl, with the L-shaped circuit at the

centre of the action. This means that wherever you are at Lydden Hill you never feel far from the action, and as BHP is one of the most action packed shows of the year, that can only be a good thing.

The track is in constant use from the show's opening right up to kicking out time with both amateur drivers – who get their high-speed kicks through booking public track time – to full-on pro demo runs from classic rally cars,

modern Time Attack racers and the sideways sliding nutters from the drift fraternity, each one doing their best to amp up the crowd and put on a show for the legions of paying punters.

And speaking of punters, from the looks of the full car park on the hill, it seemed there were plenty of people willing to shed their hard-earned cash for a slice of BHP action, which can only be a good thing, as at some shows you go to these days the





cars on display far outweigh the public demand by a considerable ratio.

And part of the draw of the BHP show is its diverse range of cars on display. Far from being confined to a single marque, BHP embraces all makes and models from standard to modified to full on bonkers track monsters, which means there really

is something for everyone. We spent hours trawling around the club stands checking out the varied displays, dwelling longer on the Japanese examples of course, and there were some great examples to drink in. But ultimately, you don't go to the BHP show to simply look at perfectly polished paintwork, you go to check out the action

on the track.

Although open to all makes, the track sessions were grouped into displays with public track time in between, and for Japanese car fans it was the drifting displays that were the ones to watch, not only because they were dominated by machines originating from the Land of the Rising Sun, but also because the

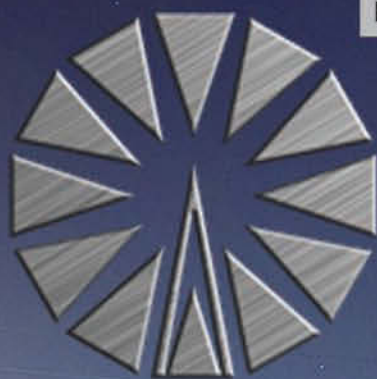
short L-shaped track meant the drivers could light up the rear tyres for laps at a time, producing a constant outpouring of thick tyre smoke that engulfed the natural amphitheatre location. Especially the SATS Motorsport Supra driven by Mark Luney, who somehow seemed to produce more smoke than the rest of the field put together!

Overall, the BHP show was a success, especially as it seemed to get over the issue of cars queuing to get into the track in the morning.

There was obviously a bottleneck of cars at the end of the show, with people trying to exit the venue, but it was nothing that would spoil your enjoyment of the event. We'll certainly be there next year, will you?



FOR MORE INFORMATION VISIT WWW.ACTIONCLUTCH.COM



ACTION CLUTCH^{COM}

MADE IN USA!

PERFORMANCE CLUTCHES AND FLYWHEELS

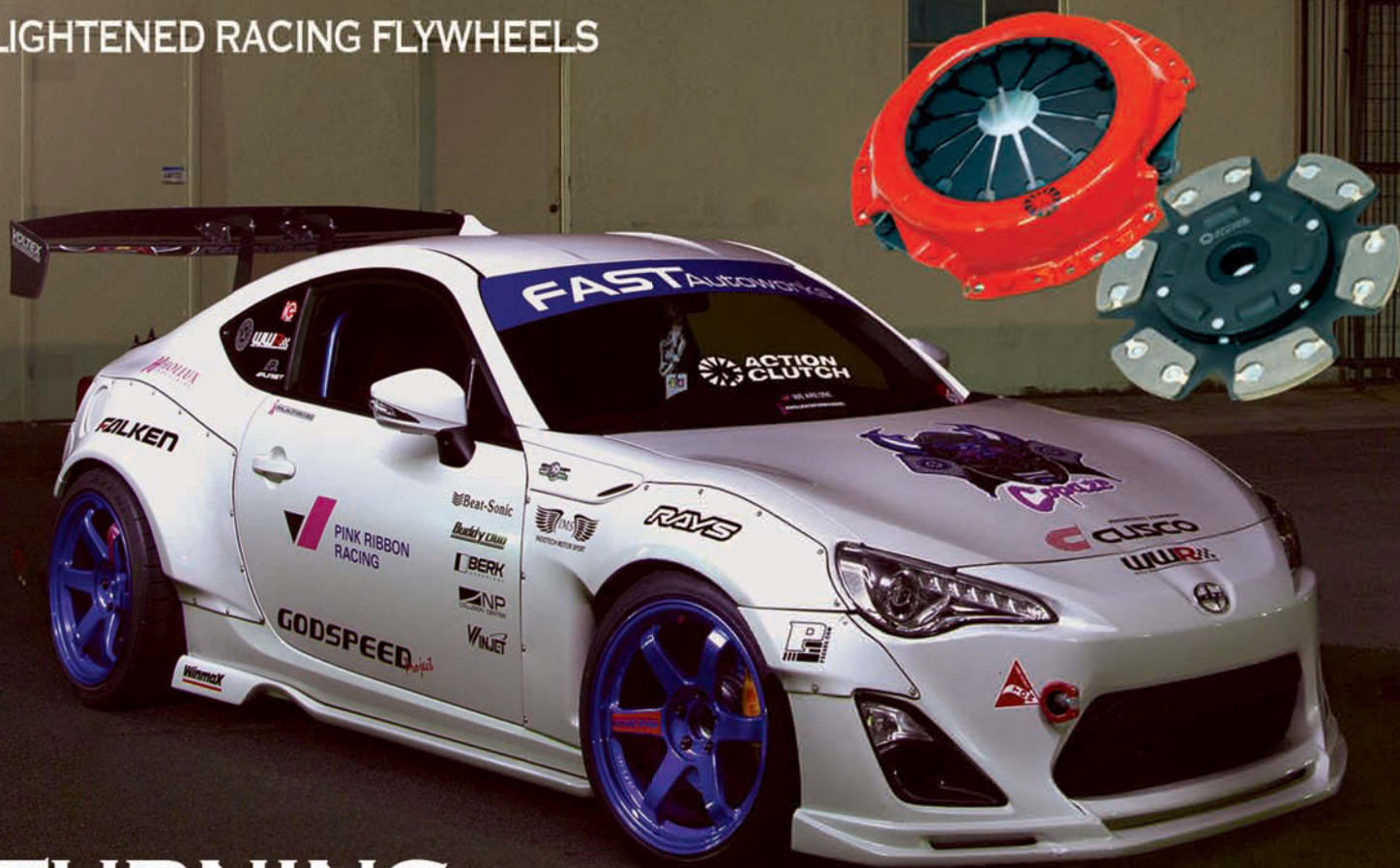
STAGE 2 . STREET PERFORMANCE KIT

STAGE 3 . STREET/TRACK PERFORMANCE KIT

STAGE 4 . HIGH POWER STREET/TRACK PERFORMANCE KIT

STAGE 5 . HIGH POWER TRACK PERFORMANCE KIT

LIGHTENED RACING FLYWHEELS



TURNING THE COMPETITION DOWN!

DEALER AND TRADE INQUIRIES WELCOME!
sales@actionclutch.com

ROAD CAR

RACE CAR

ARMoured VEHICLES

HISTORIC

CITY HEAT.

Experience ultimate control in the urban playground.



If you appreciate control, style and performance, our caliper, disc and brake kit upgrades are designed for you.

We draw on our race pedigree to reduce brake system weight, improve track day durability and provide precise control with no fade. Braking confidence guaranteed.

Upgrade to AP Racing brakes and clutches for ultimate control.

T: +44 (0) 24 7663 9595 E: roadtech@apracings.co.uk

AP
RACING

The science of friction www.apracings.com



Performance Exhausts...
...Driven to be Better



- ♥ Over 40 Years Experience in Designing Sports Exhausts
- ♥ Cutting Edge Engineering Technology
- ♥ T304 Stainless Steel & TIG Welded Systems



COBRASPORT.COM // +44 (0) 114 244 7123



NEED PARTS..? **GET
FUNK'D!**

JAPANESE
PERFORMANCE
PARTS
DISTRIBUTION

FUNKYPOWER
.CO.UK

PRICE PROMISE

TOP BRANDS AT
UNBEATABLE PRICES

ESTABLISHED FOR OVER
10 YEARS

FROM SERVICING TO SUPERCHARGING YOUR ONE-STOP-SHOP!



f FUNKYPOWERUK

✉ SALES@FUNKYPOWER.CO.UK

☎ 01563 850 240

THE M RESTORATION N

BUILDING A FEATURE CAR IS TOUGH. TAKING AN ABUSED ONE, WORKING OUT WHAT WENT WRONG AND MAKING IT BETTER, CAN BE EVEN TOUGHER – AS THE OWNER OF THIS FLAME-SPITTING 600BHP+ TOYOTA CELICA GT4 FOUND OUT...

WORDS: DAN GOODYER PICS: OLLIE WILDSMITH

It was an absolute mess! This is how 44-year-old Shane Dyson describes the engine in his Toyota Celica ST205 GT4 when he bought it. 'The pistons were literally melted, so were some of the valves. There were cracks in the block and it looked like something had gone through the turbo and wrecked that – it wasn't pretty, that's for sure.' It was a damning list of problems that meant the whole thing would need rebuilding. Which was a shame, as it had been a very healthy and very fast car in a previous life.

Shane explains: 'I know the car was originally built by Frankenstein Motorsport, and was featured on the cover of a tuning magazine that no longer exists, back in 2007. I've got a copy of the mag and the car looks great. They ran a GT35 on it and made 580bhp. The feature was quite helpful

actually when trying to piece together the previous spec and working out what had happened. Eventually it was sold to someone who just abused it, if the engine damage is anything to go by. I suspect they rebuilt the engine or changed the spec but just ran it on the old map. That would certainly explain why it ran so lean and melted everything.'

A mechanic by trade, Shane stripped the engine down himself. In fact, he's done pretty much the entire rebuild on his own, despite earning a living through selling ECU upgrades on Land Rovers. His company Mastaz doesn't work on Toyotas at all, yet Shane has two, this one and another relatively standard ST205 GT4. He drives them both on the road, too, but this is the one with all the go-faster bits on.

There are plenty of goodies you can see from the outside.





OUT TO LAUNCH SHANE HAS ENABLED ALL OF THE TOYS PROVIDED BY THE DTA ECU, INCLUDING LAUNCH CONTROL. IT'S SET AT 5000RPM AND PRODUCES AROUND HALF A BAR OF BOOST ON LAUNCH, BEFORE IT FIRES THROUGH THE GEARS AND THE BOOST LEVEL ROCKETS. SO YOU CAN IMAGINE HOW VIOLENTLY IT LAUNCHES. SHANE IS ALREADY IN THE '15 AT SANTA POD WITHOUT MAKING ANY DRAG-SPECIFIC SETUP CHANGES.



THE BLOCK IS FROM A RWD, NATURALLY ASPIRATED HILLCLIMB CAR

For a start, the side-exit exhaust poking out of the front bumper certainly isn't shy! It's become a popular feature of this anti-social beast. However, the bulk of the work is hidden deep in the engine bay, among the bright green highlights. This is technically the second engine Shane has built for the car. Rebuilds on a standard car are relatively straightforward. You order the OE-spec bits and put it together to factory-spec tolerances. Custom rebuilds on big-power lumps like this aren't always as easy. Or cheap.

'I was hoping the first rebuild would be straightforward,' Shane admits. 'I bought new pistons, honed the bores and mapped it myself. After 1000 run-in miles everything looked good. Then I started boosting it and instantly had issues.

I checked the plugs and number two was very clean, so I took the head off. The gasket was fine but I found a hairline crack in the bore. It wasn't the best news to be honest.'

Part of the problem was the cracked block wasn't from a standard Celica GT4 3S-GTE engine. It was in fact a Caldina block, a relatively popular upgrade from a car that was never officially sold in the UK. This means a Caldina block is harder to come by and a bit more expensive than a regular GT4 block. Shane adds: 'After a bit of thinking, I decided I was going down the Darton Sleeves route. This meant fitting strong cylinder wall liners to a block to increase its strength. I contacted an engineering company in Wolverhampton about it and it was purely by

coincidence that they had something else in stock that caught my eye.

'They had an engine block there that was intended for a naturally-aspirated, rear-wheel drive hillclimb car. It sounds like the complete opposite of what I was looking for, doesn't it? Thing is, it was a TTE Group A block. So basically it was a thick-walled engine block from the 3S family. I wasn't sure if it would work exactly. Being designed for a rear-wheel drive car meant it was normally fitted longitudinally, and I would have to rotate it around to fit the transverse arrangement in the Celica – but the potential benefits outweighed any problems. I decided I could simply cut bits about to get it to fit if I really had to.'

As it turns out, the biggest of

those 'bits' was the engine mount, which had to be cut to clear the transfer box. Shane continues: 'These blocks are used for naturally-aspirated race engines, so they're really thick-walled and don't have an oil feed to supply a turbo. So I made a custom manifold for the oil pressure sender, to feed the turbo with oil. They don't have under-piston oil squirters either. You can add them but they're there for cooling rather than lubrication, so I've gone for a water/methanol injection kit instead. Which does a similar job but on the other side of the piston, and has the benefit of giving me more power, too.'

'The other thing with this block is you can't just put standard pistons in them because there isn't enough clearance. After some research,



I found that a set of Nissan SR20 pistons would fit and give me a really low compression ratio. I haven't done the calculations but it's probably somewhere around the 6:1 mark. At top-dead-centre these pistons are sitting 3mm lower than usual. The benefit of this is there's no detonation at all, especially when combined with the water/methanol injection. The downside is it's got no power off boost, but I've tried to compensate for that with my turbo choice.'

The big metallic snail in question is a BorgWarner S366. These big BorgWarner turbos are an increasingly popular choice these days with people chasing serious power levels. Shane wanted a true twin-scroll setup to match the

**STABILITY CONTROL
SHANE HAS FABRICATED A
FRONT SPLITTER OUT OF
PLYWOOD: IT POKES OUT
FROM UNDER THE FRONT
BUMPER AND RUNS BACK
UNDER THE ENGINE. I WAS
SURPRISED HOW EFFECTIVE IT
IS. THE FRONT IS MUCH MORE
STABLE NOW AT HIGH SPEEDS**

output flange on the BorgWarner turbine housing. However, finding a suitable exhaust setup proved tricky. Eventually, he turned to Full Race in the USA. They fabricated a true twin-scroll exhaust manifold with a pair of external wastegate apertures, one on either side of the divide.

Shane explains: 'The twin-scroll setup helps the turbo spool faster, which is really important on this engine because the compression is so low. There isn't enough exhaust gas to really get the turbine spinning at low revs.



DIY ECU TUNING
BEING AN ECU SPECIALIST, SHANE HAS MAPPED THE CAR HIMSELF KNOWING THAT HE ONLY BELIEVES IN MAPPING ON THE ROAD, AND WITH VISIONS OF HIM DRIVING FULL THROTTLE WHILE SIMULTANEOUSLY LOOKING AT A LAPTOP, WE ASKED HIM HOW IT WAS POSSIBLE? 'ITS ALL DONE THROUGH LOGS,' HE REPLIES. 'IN SHORT, I DRIVE THE CAR, LOOK AT THE RESULTS AND THEN ADJUST THE TABLES. THE DTA ECU DOES HAVE A SELF-LEARNING FUNCTION THOUGH, SO YOU CAN USE THAT AND THEN ENLARGE THE RESOLUTION TO GET MORE AND MORE ACCURATE RESULTS. I'D LIKE TO THANK PETE AT THOR RACING, TOO. HE CARRIED OUT SOME EARLY MAPPING ON THE CAR BEFORE I MADE SOME CHANGES AND HAD TO RE-MAP IT MYSELF. HE GAVE ME PLENTY OF HELPFUL TIPS ALONG THE WAY, TOO'

Cylinders one and four are paired, as are cylinders two and three. It's done this way because of the firing order of

the engine, so there's no cross-talk between the exhaust pulses. In other words every 'pulse' of exhaust gas works to spin the turbo effectively, whereas in a conventional turbo exhaust manifold some of the forces end up fighting each other. There is a huge separate TIAL external wastegate on each side of the divide for the same reason.

'I didn't get them to ceramic-coat it just in case it needed some alterations,' Shane explains. 'Full Race were really helpful. They built a jig around an existing design they had for an old Celica racecar that had really long external wastegate tubes. I told them I wanted short feeds to the wastegate and the spec of turbo I was going for. They sent loads of

photos over during the build and, when it arrived, all I needed to do to get it to fit was remove the heat-shield from the alternator and cut one of the lugs that used to hold the factory chargecooler in place.'

The turbo was then coated by Craig at TopGear Stockport; black on the turbine and green on the compressor. This keeps all the heat in the turbo and exhaust and out of the bay, improves power and reduces the risk of the engine overheating. Talking of the engine bay, Shane admits he 'may have gone a little bit over the top with the colour-coding.' It's all a matter of taste of course. Beauty is in the eye of the beer holder, as they say. 'What can I say?' he asks, 'I like bright colours!'

So far it sounds like Shane has bought all new parts, and that he may as well have started with a standard car, right? Luckily he was able to salvage some trick bits from the previous build. For a start he could re-use the heavily modified cylinder head, complete with oversized valves and really aggressive custom 294° camshafts made by Kent.

BIGGER ISN'T BETTER
THE GT4 RUNS ON SURPRISINGLY SMALL WHEELS, JUST 8X16IN COMPOMOTIVE MOS WRAPPED IN 245/45/16 RUBBER. THEY MAY NOT IMPRESS THE HARDWARE WHEEL FREAKS, BUT THEY'RE LIGHT, AND BEING SMALL THEY HELP THE CELICA TO HANDLE PROPERLY, TOO. SHANE ISN'T KEEN ON RUNNING BIGGER WHEELS, BUT HIS HAND MIGHT BE FORCED BY FUTURE BRAKE UPGRADES, ALTHOUGH HED LIKE TO GO NO LARGER THAN 17S IF HE CAN HELP IT





'I'D LIKE OT DO MORE TRACKDAYS, BUT THE NOISE TESTS ARE TRICKY'

A legacy of the original Frankenstein build, the head is focused on giving power at the top end of the rev range, which suits Shane's ultra-low compression engine build, too.

The inlet manifold is pretty trick, too. Shane adds: 'The original setup features a pipe that runs over the top of the engine, feeding the compressed air to the throttle body. Obviously this isn't ideal because when the engine is really hot it's basically warming up that air. So some people use a Caldina inlet manifold, which has a sort of

side-feed arrangement instead. The manifold on this has been made – very well – by someone in the past. The bottom half is a Caldina manifold and has been very nicely ally-welded to a large plenum chamber on top. It seems to do the job.'

We should mention the 'box while we're discussing the surviving mods, too. Listed in the previous feature as a mysteriously upgraded 'semi-Quaife' 'box, Shane suspects it's an OE box with a couple of upgraded Quaife gears and synchros: 'Second and third definitely sound slightly different to the rest, and not in the way that worn gears sound, either. So maybe they're among the upgraded bits? It certainly shifts nice and fast, although part of that is the Clutch Masters single-plate paddle clutch I installed. It's a weird setup because the friction material isn't where you expect it to be, but in testing it's proven itself slip-free up to about 650bhp, which is very impressive for a relatively straightforward single-plate.'

Yes, he did say 650bhp. In truth it doesn't usually run that much power. For one thing, Shane drives the car on the road. A lot. His usual settings are 1.6bar (23psi) for around 500bhp for the road, and 1.8 or 1.9bar (27psi) at Santa Pod for 600bhp. Always on Shell V-Power, as it's regularly driven on the road. Although it can do 2.1bar (30psi) for over 650bhp. Shane adds: 'I'd like to do more trackdays in it, but noise tests are difficult. The static ones aren't too bad but I often trip the drive-by meter with that side-exit, so I'm in two minds at the moment whether to fit a silencer to it.'

In a way we hope Shane doesn't try and tame this monster. The noisy front side-exit exhaust is a big part of the character of this car. You hear it coming before you see it. When it does appear, the Celica stands out on the road like a brightly-coloured wild animal, roaring loudly everywhere it goes. Whooshing and chirping with delight. It's got a second life, and it's not afraid to shout about it. **JP**

ENGINE

2.0-litre, 16v, 4-cyl, 3S-GTE Toyota Team Europe (TTE) Group A block, TTE crankshaft, Eagle forged steel H-Beam con-rods, Wiseco forged Nissan pistons, ARP bolts throughout, ACL Race big end and main bearings, modified Caldina sump carrier, custom oil pressure sender manifold to feed oil to turbocharger, aluminium front pulley with trigger wheel and crank sensor, HKS metal head gasket with modified water ways, heavily ported and flowed cylinder head, oversize race valves and valve springs, Kent 294° custom cams, HKS vernier pulleys, custom side-feed inlet manifold, 80mm throttle body, 1000cc fuel injectors, HKS twin feed fuel rail, NGK Iridium spark plugs, MSD coil pack, DTA Pro S60 ECU mapped by Shane, Fuelab fuel pressure regulator, Holley lift pump, twin outlet fuel swirl pot, 2x Bosch 044 fuel pumps, custom made ceramic-coated FullRace twin-scroll exhaust manifold, Borg-Warner S366 twin-scroll T4 turbo, headlamp delete air inlet and 4in anti-surge feed, ceramic-coating on turbine housing, 2x TIAL MVS 38mm V-band external wastegates, 2x screamer pipes pointing straight down to the floor, side-exit exhaust through front wing, Bailey catch tank, silicone hoses, custom intercooler with 3in pipe work, HKS dump valve, Devils Own progressive water/methanol injection kit with large stainless steel boot tank, launch control, AEM Tru Boost controller, AEM wideband AFR gauge, Pro Alloy radiator with twin fans, Mocal oil cooler with thermostat

POWER:

Over 600bhp @ 28psi turbo boost

TRANSMISSION

Custom five-speed gearbox with Quaife upgrades, Clutch Masters FX Kevlar clutch, lightweight flywheel, short shifter

BRAKES

EBC Bluestuff pads, otherwise OE setup with 4-pot calipers up front and 315mm discs all round

SUSPENSION

TRD lowering springs and adjustable dampers, Whiteline anti-roll bars front and rear, Cusco strut braces front and rear, fully polybushed, custom differential mount

WHEELS & TYRES

8x16in Compomotive MO wheels wrapped in 245/45/16 BFGoodrich tyres


INTERIOR


Cusco rollcage, Recaro seats with Sparco harnesses, Sparco steering wheel with launch button, Autometer gauges, stripped out interior

EXTERIOR

Projector headlights, modified front bumper with separate splitter, Varis carbon-fibre bonnet, custom vents in front wings, Subaru Impreza rear lights with body and boot modifications to suit, resprayed in custom green pearl

STOP IT NOW
AMAZINGLY, THIS 600BHP GT4 IS RUNNING STANDARD BRAKES! THE ONLY UPGRADE IS A SET OF EBC BLUESTUFF TRACKDAY PADS. SHANE ADDS: 'THE FACTORY SETUP SEEMS TO WORK REALLY WELL. IT'S GOT 4-POT CALIPERS UP FRONT AND RELATIVELY BIG DISCS ALL ROUND. THEY ARE NEXT ON MY LIST, THOUGH. I'M GOING TO PUT LARGER CALIPERS AND DISCS ON THE FRONT, AND SWAP THE FRONT 4-POT CALIPERS TO THE REAR. THAT SHOULD GIVE ME STRONGER STOPPING POWER AND STILL HAVE THE RIGHT BALANCE WITHOUT HAVING TO MESS AROUND WITH BIAS VALVES'






Reduced MOT costs

Prolonged tyre life

Fit and forget - Excellent longevity

Great noise damping



British Made

The number one choice in suspension bushes.



Fit Polybush for precise steering and a controlled ride at all speeds.



Tighten up your suspension by fitting Polybush's 7BA to your Japanese performance car.



Fit Polybush for consistent steering geometry.



Want to reduce understeer? Fit 7AT to your front wishbone for optimum geometry during hard cornering.

Polybush, Clywedog Road South, Wrexham Industrial Estate, Wrexham LL13 9XS Tel: +44 (0) 1978 664316 Fax: +44 (0) 1978 661190
 Website: www.polybush.co.uk Email: sales@polybush.co.uk



PROGRESSIVE EQUIPMENT

CUSCO



Cusco Japan are one of the premier tuners in the World. They have extensive experience in GT, Formula, and World Rally Races. They design not only suspension and chassis components, but engine tuning, headers, and more. They offer parts such as adjustable cam gears, spoilers, intake systems, chassis under reinforcements, limited slip differentials and turbo intercooler piping.

Suspension Parts & Kits

Cusco suspension coil-over kits are used by professionals across the world in various genres of motorsports including; dirt/gravel rally racing, circuit racing, time attack, gymkhana and autocross.



40 WAY DAMPER ADJUST
(Rotary dial with CPRV needle valve for precise damper adjustment)

PILLOWBALL UPPER MOUNT
(Front camber adjustment available for strut type vehicles)

LONG LASTING SPRINGS
(Over 200kgf/mm² of tensile strength)

DUST BOOT

VEHICLE SPECIFIC BUMP RUBBER STOP
(Under dust boot)



HIGH STRENGTH THREADED CASING
(Special coating tested over 500hrs of harsh elements)

POLYMER THRUST SEAT

DURABLE ALUMINUM ALLOY LOWER SEAT & LOCK NUT

FULL HEIGHT ADJUSTABLE SYSTEM
(Spring preload & shock stroke not affected by vehicle height change)
Vehicle can be safely lowered without sacrificing comfort.

RIBBED KNUCKLE BRACKET
Specific metals chosen for each unique vehicle requirements. Long lasting design emphasized for this high stress load area.

Discounts If Your Car Has Cusco Decal!

Co-ordSport Ltd Netherlands
Solvayweg 15A, 6049 CP Herten
The Netherlands
Tel: +31(0)475 772719
info@coordsport.nl
www.coordsport.nl

Co-ordSport Ltd Germany
Oberstraße 35, 56332 Aiken
Germany
Tel: +49(0)2605 408 9946
info@coordsport.de
www.coordsport.de

Co-ordSport Ltd UK
Unit 1, Cleton St, Tipton,
West Midlands, DY4 7TR, UK
Tel: +44(0)121 661 6263
sales@coordsport.com
www.coordsport.com

PartBOX
www.part-box.com



JAP SPEED

.CO.UK

EXHAUSTS AND MANIFOLDS



Exhausts contribute to your overall performance and they can make or break your cars appearance. Our performance exhausts are not only styled to make your car stand out, they are also a larger diameter than standard systems to significantly improve your car's breathing capabilities and improve horsepower by offering optimal flow.

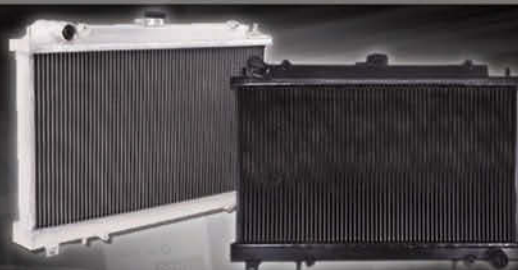
INTERCOOLER KITS



Fitting a front mount intercooler is an excellent way of safely increasing your engines power output. Replacing the OEM intercooler with a larger, front mounted system means that much more cooling is on offer for the hot air trying to enter the engine. The cooler the air the more power you will have.



RADIATORS



Our direct-fit aluminium, lightweight performance radiators will keep your coolant temperature down no matter how hard you are pushing thanks to a 30% increase in cooling capability over the standard unit.

CHAMPIONSHIP WINNING SUSPENSION



Japspeed performance suspension parts will help you get the very best handling out of your car. Our championship winning suspension parts can make a big difference to your car's performance and safety by improving your centre of gravity whilst offering extra lock for improved cornering and control.

T | 08444 489 080 E | sales@japspeed.co.uk W | www.japspeed.co.uk



SIMPLE PLEASURES

DOMINIC LE MAY HAVE AN SR20 IN HIS DATSUN, BUT HE'S TUNING IT THE OLD FASHIONED WAY. AND IT'S NOT THE SR20 YOU'RE EXPECTING...

WORDS: DANIEL BEVIS PHOTOS: VIKTOR BENYI

The notion of a 'poor man's BMW' is a tricky and largely erroneous one. Indeed, a 'poor man's...' anything is usually more offensive than it is logical – look at all the people who refer to the Porsche Boxster as a poor man's 911. How many of them have driven the two to compare?

So the fact that Datsun's 510 series is fairly universally regarded as a 'poor man's BMW' is more an unfortunate historical quirk than anything else. It stems from the notion that Datsun had the BMW 1602 firmly in their crosshairs, the German marque's Neue Klasse gaining traction and setting new standards for quality, and the 510 was a yapping upstart at the Beemer's heels. Which is all nonsense really, of course – the promising little Datsun had independent rear

suspension, for goodness' sake, and disc brakes, and everything else you need to build a little street-racer upon. No wonder their diminutive three-box chic is in the ascendant these days – JDM tuners can't seem to get enough of them.

This does bring its own problems, of course. They're relatively obscure, and now that people are cottoning on to their charms, it's pretty unusual to find them up for sale – at least in any sort of salvageable form. And it's a fairly safe bet that if you see one out and about, the owner probably has another one at home, or lurking in their past.

Dominic Le, the owner of this shimmering black example, began his 510 journey with a rather cruddy sedan, which rather swiftly made way for this two-



10

11





door once he'd identified it as a better base for a project.

'I found this car in San Diego, and the seller said it was a running car with a small fender bender,' he recalls with a grimace. 'But that supposedly minor damage turned out to be a full-on front-end impact which had crushed the passenger side.' With this being the favourable base, you can only imagine what that sedan must have been like...

'As bad as it sounds, I just had to have it,' he continues. 'I'm a strong believer that everything happens for a reason, and this 510 was reason enough for me.' Fair enough – sometimes, when you know, you know. And so it was time to roll up his sleeves and get stuck in.

Now, Dominic is a man who strives for perfection. This was

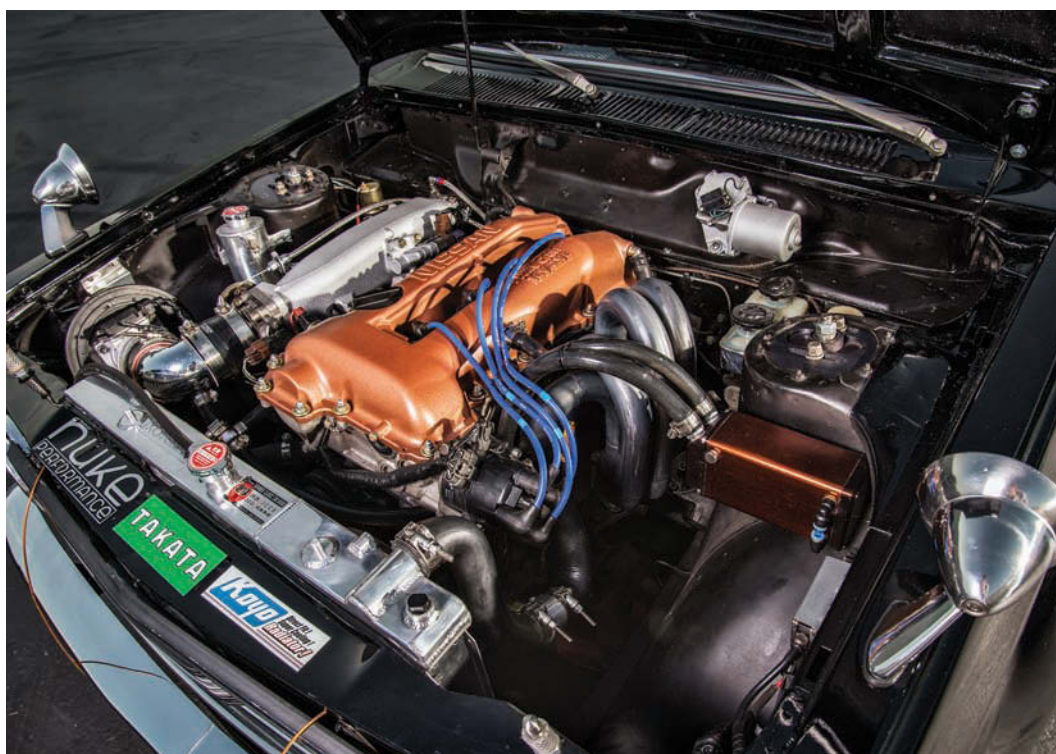
never going to be a thrown-together lash-up; 'good enough' just isn't good enough. Working day-to-day within the financial heart of Mitsubishi's North American headquarters, as well as working with Nuke Performance in addition to that, he knows more than a little about precision and fastidiousness. So countless hours were poured into straightening and perfecting the bodywork, getting everything just-so; the wings received a set of BRE flares in homage to the retro Datsun racers that Dominic admired as a child, while the rest of the bodywork was kept as simple and clean as it left the factory. Never one to make things easy for himself, he had it in mind to shoot the shell in Mercedes-Benz Jet Black and, as any bodywork aficionado will tell you, that's

pretty much the least forgiving colour. Everything had to be beyond perfect; dream-like, almost. And he's achieved that rather well, hasn't he?

What's most notable about this build, however, isn't the Darth Vader looks. It's what's lurking under the bonnet. You see, our hero has opted for Nissan's SR20 engine... but not in the manner you'd expect. Sure, it'd have been easy to plunder a 200SX for its boosted twin-cam, but instead Dominic has chosen to go down the nat-asp route with an SR20DE. This JDM option was originally found in things like Primeras and Rasheens, offering a sturdy but inoffensive 140bhp in stock tune. A healthy base for tuning, but why not just make it easy on yourself and go with the bigger-power, more abundant turbo motor?

'I wanted something simple, and to not have to worry about the problems that a turbo motor might bring,' he shrugs, matter-of-factly. Although it didn't quite work out that way, it has to be said. 'To my surprise, this simple engine wasn't actually that simple at all! There wasn't much information on the motor here in the States, so when I did the wiring it took me months to figure it out – but to be honest, I really wanted to have a powerful, naturally-aspirated motor.' Knowing that something fairly radical would be required in order to achieve this goal, he opted for a Tomei stroker kit, which took the displacement out from 1998cc to 2188cc, and also threw into the mix Tomei's PonCam camshafts, fuel pressure regulator and valve springs. The headline figure that he'd been

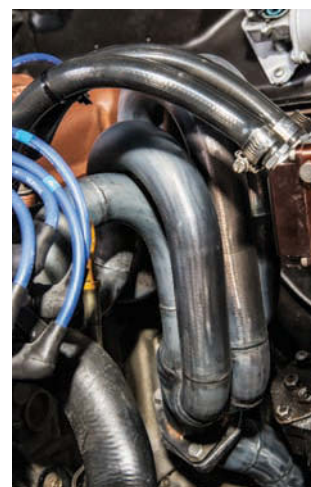
THE SR20DE ENGINE
DOMINIC'S DECISION TO USE THE SR20DE MAKES QUITE A STATEMENT; NAMELY THAT HE'S DELIBERATELY SWERVED THE MORE OBVIOUS CHOICE OF THE SR20DET. AND THAT 'T' MAKES A WHOLE WORLD OF DIFFERENCE. WHILE THE FORCE-INDUCED UNIT HAS BECOME A DARLING OF THE AFTERMARKET ENGINE SWAP SCENE, WITH ITS VERSATILITY AND EAGERNESS TO ACCEPT STRATOSPHERIC LEVELS OF BOOST, THE NATURALLY-ASPIRATED COUSIN OFFERS A RATHER MORE OLD-SCHOOL APPROACH. WITHOUT THE GO-FASTER SHENANIGANS OF A TURBO, DOMINIC IS FREE TO EXPLORE RETRO TUNING AVENUES – STROKING THE DISPLACEMENT, TINKERING WITH THE HEAD, FIDDLING WITH THE FUELLING – TO FIND EXTRA HORSEPOWER THE OLD-FASHIONED WAY. THAT HE'S USING A MODERN-ISH BASE FOR THIS IS MORE DOWN TO RELIABILITY THAN AUTHENTICITY, BUT HE'S STILL RETAINING THE HOT-ROD CHARACTER OF THE 510. 'THERE ARE SO MANY TURBO 510S OUT THERE; I JUST WANTED TO DO SOMETHING A LITTLE DIFFERENT,' HE SAYS



'I REALLY WANTED A POWERFUL, NATURALLY ASPIRATED MOTOR'

shooting for with all this was a nice, round 200bhp – quite an improvement over the stock output – and he went all-out in pursuit of joining the two-hundred club. Bigger injectors, throttle-body mods, custom exhaust work... when you consider the weight of the thing, that's more than plenty to be entertaining – and as if that wasn't entertaining enough, it revs to 9000rpm! Which must be hilarious fun.

Half the battle with building a fast-road car is in the handling, of course. You can have all the power in the world, but if you can't deploy it, it's basically meaningless. So Dominic put a lot of thought into setting the chassis up right to make for an entertaining steer. 'The front has 280ZX struts and





**UPSETTING THE PURISTS
DEVIATING FROM STANDARD AND
CHOPPING THINGS UP IS ALL
PART OF THE FUN WITH
MODIFYING OLD CARS. TAKE
THOSE FRONT WINGS, FOR
EXAMPLE. DOMINIC WANTED TO
EMULATE THE 510 RACERS OF
YORE WITH A SET OF BULGING
ARCH FLARES, SO HE DIDN'T HAVE
ANY QUALMS ABOUT CUTTING UP
HIS ORIGINAL WINGS TO GRAFT
THEM IN. PURISTS MAY CHOKO ON
THEIR PIPES, BUT IT'S HIS CAR,
AND HE'S DOING IT HIS WAY.
DITTO THE WHEELS - THEY'RE
ULTRA-RARE 1970S ENKEI EK64S,
BUT HE'S HAPPILY BROKEN THEM
DOWN AND REBUILT THEM TO
CREATE A FISTFUL OF EXTRA DISH,
PARTICULARLY ON THE REAR. IT'S
THIS SORT OF UNCOMPROMISING
ATTITUDE THAT MAKES THE BUILD
WHAT IT IS: UNIQUE, OUTLANDISH,
AND VERY PERSONAL**

shortened FC RX-7 Tokico shocks, with QA1 coilover perches and custom camber plates,' he explains. 'Out back, we're looking at a modified crossmember with custom camber adjustment, and KYB AGX shocks with QA1 coilover adjusters and Eibach 300lb springs.' This isn't off-the-shelf stuff, this is research paying dividends. And naturally it would be madness to throw such a percentage power increase at the factory brakes, however advanced they may

have appeared in the late-1960s, so Dominic's plumbed in a custom Wilwood big brake kit at the front, with an artfully reworked Nissan Maxima disc setup on the back axle. For the sake of belt-and-braces, the diff is an R180 Subaru STI unit.

It goes without saying that project cars live or die by their wheel choices – that's the fickle nature of social media, if nothing else – so it's pleasing to note that Dominic's played a blinder with the rolling stock, too. A 15in diameter is very much an appropriate size for a 510 of this nature – you have to be very careful when over-wheeling a classic, you need to be able to justify yourself – and Enkei's EK64 is a belter of a design. It's as if someone took the meshy wheels from a three-door Sierra Cosworth and rebuilt them with a bit of extra dish – what's not to love?

As you might hope from a man with such passion for the marque – and Dominic's got three 510s in his collection now, it's hard to keep up – this little black street-racer is a riot of detail. Take a look at it from

head-on, you'll spot that amongst that mile-deep, near-liquid black paint, he's left a broad exposed stripe on the bonnet, to showcase that it's been replaced with a carbon-fibre item. Beneath its lip sit BMW E30 projector headlights in the outer holes, the inners having been sacrificed for performance purposes. The JDM wing-mounted mirrors say more about retro chic than mere words can convey; the period aftermarket airdam is glorious ('That came from an older gentleman in Maryland,' Dominic says. 'He used it on his own racing 510 during the early 1980s...') and the juxtaposition of those flared arches with the broad Enkei rims really does evoke those BRE racers that Dominic clearly still yearns after.

The story continues inside the cabin. Those old-school Recaros you see actually came from a Honda CRX – but hey, there's an SR20 under the bonnet, he's not trying to win any concours trophies for originality – and they're neatly complemented by all manner of custom trim, as well as a half-

cage whose oh-so-visible diagonal bar acts as a statement of intent for anyone in the rear-view mirror who may be foolish enough to try it on.

'My mother helped to sew up the leather headliner and door panels,' he smiles. 'I hadn't really worked on interior trim before, and this gave me something new to learn – and I'd say that the result turned out pretty good!'

While trimming leather and Alcantara was a new adventure, what Dominic really knows is fuelling – his work with Nuke Performance means that he knows about petrol delivery inside out; as such, you'll spot a substantial fuel cell in the boot along with a surge tank and external filters, feeding precious lifeblood to that racy, high-revving twin-cam. If the engine is the wrangled soul of this 510, that intricate fuel system is its beating heart.

This, in fact, is a build with a lot of heart. And passion, and personality. Indeed, it's the culmination of years upon years of playing about with cool old cars, chasing the unicorns of



'THE ENKEI EK64 RIMS SUIT THE 510'S LOOK TO PERFECTION'

ENGINE

2.0-litre, 4-cyl, 16v, SR20DE fuel-injected twin-cam, Tomei 2.2-litre stroker kit, AEM Infinity ECU, HKS intake, PonCam camshafts, fuel pressure regulator and valve springs, modified throttle body, GReddy oil relocation kit and catch can, custom high-rise manifold and fuel cell, Nuke Performance fuel filter and surge tank, Walbro fuel pump, Koyo N-flow radiator, Optima Yellow Top battery relocated to boot

TRANSMISSION

S14 five-speed manual transmission, custom propshaft, Exedy Stage 2 clutch, B&M short-shifter, R180 Subaru STI differential

SUSPENSION

Shortened front 280ZX struts with RX-7 inserts and Eibach 275lb springs, custom rear KYB AGX shocks with QA1 coilovers and Eibach 300lb springs, McKinney Motorsport front crossmember, VG custom transmission crossmember, DG camber plates

BRAKES

Custom Wilwood big front brake kit, Nissan Maxima rear disc conversion

WHEELS & TYRES

8x15in (front) and 9x15in (rear) Enkei EK64 split rim wheels with 195/55/15 Toyo T1R tyres


INTERIOR

JDM Recaro Honda CRX seats recovered in leather and Alcantara, Takata Drift 3 harnesses, custom headlining, door panels and half-cage, Auto Meter gauges

EXTERIOR

Mercedes-Benz Jet Black, BRE arch flares, BMW E30 projector-beam headlights, triple-plated JDM Bluebird SSS grille, carbon-fibre bonnet, JDM wing-mounted mirrors, period aftermarket front air dam

childhood memories, and splicing together automotive DNA to make those dreams come true.

'I've always messed around with cars since I was young, and I never thought I would make a career out of this hobby,' Dominic enthuses with a charged twinkle in his eye. His excitement is infectious and it's impressive to consider that, while a build like this would represent the final, ultimate project for a lot of people, for this guy it's a stepping stone. Think this 510 is cool? Just wait till he's finished the next one... 

DIFFERENT STROKES
HOT-RODDERS HAVE BEEN STROKING THEIR MOTORS FROM TIME IMMEMORIAL. IT'S NOT AS FILTHY AS IT SOUNDS - IT BASICALLY INVOLVES INCREASING THE CRANK THROW (I.E. THE DIFFERENCE BETWEEN A PISTON'S TOP-DEAD-CENTRE AND BOTTOM-DEAD-CENTRE POSITIONS), THE INCREASED DISPLACEMENT MEANING THAT YOU CAN STUFF MORE AIR AND FUEL IN THERE. QED. LONGER RODS, SHORTER PISTONS AND A CUSTOM CRANK ARE YOUR FRIENDS HERE. AND THEN, OF COURSE, YOU'VE GOT TO THINK ABOUT GETTING ENOUGH EXTRA AIR AND FUEL FED IN TO FILL THE SPACE...



ABP MOTORSPORT

We share the passion!

Call our Sales Team Today

01270 567 177

HONDA Civic Type R FN2

ABP have developed a full range of tuning parts for the FN2 Civic Type R using our own development car. Testing on the Nurburgring we offer exclusive suspension, brake and performance parts that guarantee to bring your Type R alive! Who said the EP3 was better.



EXHAUSTS

MILLTEK SPORT ABP exclusive cat-back stainless steel exhaust system.....	£499.00
These exclusive to ABP Milltek systems are quite simply a must have. Superb fit, beautiful quality, amazing soundtrack and good power gains.	
MILLTEK SPORT 3" round tailpipe trims.....(pair)	£125.00
PIPER Stainless Steel Race exhaust manifold & stainless de-cat pipe.....	£630.00
PIPER Stainless Steel Race exhaust manifold & 200CEL Sports Cat.....	£770.00
O2 simulator (removes ECU light with race manifold fitted).....	£70.50
PIPER Stainless steel cat-back exhaust system.....	£520.00
HKS Sport Muffler cat-back exhaust system (3" tailpipes & HKS trims).....	£862.00

FITTING AVAILABLE ON ALL PRODUCTS / UK & WORLDWIDE DELIVERY SERVICE

AIR FILTERS

K&N Sports air filter replacement element (lifetime warranty).....	£41.00
K&N Apollo closed box air filter induction kit.....	£158.00
AEM Short Ram air induction kit (polished or red alloy intake pipe).....	£169.00
POWERTEC Stainless steel air filter kit (including heat shield).....	£149.00
PIPERCROSS Sports air filter kit (including heat shield).....	£145.00
HKS Racing Suction Kit (includes alloy intake pipe).....	£365.00

SUSPENSION

EIBACH ABP Exclusive -30mm lowering spring kit.....	£150.00
These are the very best springs you can buy for the FN2. Offering the ultimate in looks, handling, reduced roll and better ride quality there really are no downsides. Please call for fully fitted prices.	
EIBACH Pro-Kit -15mm lowering spring kit.....	£159.00
All the advantages of our -30mm kits but with less lowering!	
EIBACH Front adjustable camber bolts (essential on lowered cars).....	£25.00
EIBACH Rear camber & toe shims (to get the very best handling).....(each)	£8.50
KW Variant 1 coil-over suspension kit (fully adjustable ride height).....	£879.00
KW Variant 2 coil-over suspension kit (fully adjustable height & rebound).....	£1,069.00
KW Variant 3 coil-over suspension kit (fully adjustable height, bump & rebound).....	£1,379.00
TEIN S-Tech lowering spring kit (Front -15mm Rear -20mm).....	£228.00
TEIN Superstreet coil over kit with upper mounts (adjustable height & damping).....	£1,080.00
EIBACH 15mm Pro-Spacer kit (improves looks, steering feel & high speed stability).....	£108.00
ABP Stage 1 Fast Road suspension geometry set-up (including camber bolts).....	£135.00
This set up in ABP's workshop improves the FN2 massively. Improving turn in, reducing under-steer and offering greatly improved feel & handling. A MUST HAVE MODIFICATION.	
ABP Stage 2 Fast Road suspension geometry set-up (including bolts & rear shims).....	£224.00
As above but stage 2 also includes removing the rear hubs, fitting correct camber & toe shims (included in price) and setting both front and rear geometry to fast road spec.	

BRAKES

STOPTECH Fast Road Front brake pads.....(set)	£49.00
STOPTECH Front Sport Stop Grooved brake discs.....(pair)	£190.00
STOPTECH Rear Sport Stop Grooved brake discs.....(pair)	£145.00
POWERSLOT Front 350mm Big-disc conversion kit.....	£355.00
Kit uses original caliper and offers superior looks & braking with excellent 350mm discs.	
Kit comes complete with 350mm discs, caliper relocation brackets and fitting kit.	
STOPTECH Touring 300mm 4-POT Brake conversion kit*.....	£995.00
These new budget 300mm kits use a unique directional veined 300mm grooved disc with the ST41 4-pot caliper. Kit comes complete with discs, calipers, pads, hoses and fitting kit. This kit looks great and performs even better!	
STOPTECH BBK 328mm Brake caliper conversion kit*.....	£1,450.00
The legendary Stoptech Big Brake Kit is simply awesome in every way. Using 2-piece 328mm discs and ST40 4-pot calipers the performance on offer from this kit is unreal. Essential for ultra fast road or serious track use. Kit comes complete with 2-piece 328mm discs, alloy bells, calipers, pads, hoses and fitting kit. Choice of Black or Red calipers	
*EIBACH 15mm Pro-Spacer kit (required to fit Stoptech brake kits behind OE Honda wheels).....	£108.00
FERODO DS2500 Front high performance brake pads.....	£99.50
FERODO DS2500 Rear high performance brake pads.....	£92.50
EBC Red Ceramic Front high performance brake pads.....	£87.00
EBC Red Ceramic Rear high performance brake pads.....	£54.00
EBC Turbo Groove drilled & grooved front brake discs.....(pair)	£245.00
TAROX G88 40-Groove high performance front brake discs.....(pair)	£217.00
GOODRIDGE Stainless steel 6-line brake hose kit (including distribution blocks).....	£175.00
MOTUL RBF600 High performance brake fluid (1/2 LT).....	£15.50
FOLIATEC Caliper paint kit (various colours).....	£24.90

FITTING AVAILABLE ON ALL PRODUCTS / UK & WORLDWIDE DELIVERY SERVICE

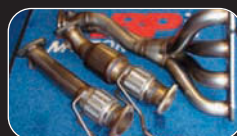
OTHER ITEMS

HKS IRIIDIUM spark plugs (set 4).....	£82.00
PIAA Headlight bulb upgrade kits (Set of 4 bulbs - sidelight, dip & main beam).....	from £95.00
YOKOHAMA 225/40X18 PARADA Spec 2 tyre.....	£125.00
YOKOHAMA 225/40X18 ADVAN NEOVA A008 tyre (ultimate track day tyre).....	£169.00
YOKOHAMA 225/35X19 Advan Sport OE tyre.....	£215.00

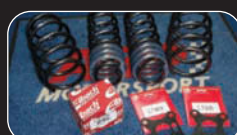
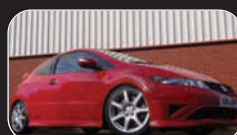
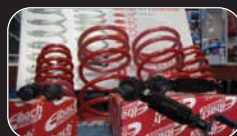
SERVICING FOR FN2 & EP3 TYPE R

ABP offer a full range of servicing to HONDA specification which will not affect the manufacturer's warranty.	
12 month / 12,500 mile service to HONDA spec including all parts & Labour.....	£119.00
24 month / 25,000 mile service to HONDA spec including all parts & Labour.....	£198.40
36 month / 37,500 mile service to HONDA spec including all parts & Labour.....	£154.00
48 month / 50,000 mile service to HONDA spec including all parts & Labour.....	£198.40
60 month / 62,500 mile service to HONDA spec including all parts & Labour.....	£119.00
72 month / 75,000 mile service to HONDA spec including all parts & Labour.....	£385.00
All of our services include MOTUL fully synthetic oil, Honda oil & air filters & NGK spark plugs. Cars are serviced to exact HONDA specification and service books are stamped maintaining the warranty. If cars are fitted with performance air filters above prices will be reduced accordingly.	

FULL RANGE OF PARTS AVAILABLE FOR ALL MAKES / MODELS
HONDA • TOYOTA • MAZDA • MITSUBISHI • SUBARU • NISSAN • LEXUS



**ALL PRICES
INCLUDE VAT**



ABP MOTORSPORT - Your One Stop Tuning Shop

- Modern easy to find premises
- Established for over 45 years
- Fully equipped on-site workshop
- Easy access of the M6 (J16)
- Large parking facilities
- Passionate staff
- Fast mail order
- 1st class customer service
- Excellent product availability
- Competitive prices

Please phone
if your car is not
listed, as only a small
range of our parts
are listed

- Mail Order • Retail Tuning Shop
- Workshop Fitting Service • MOT
- Servicing • Repairs & Tuning

HONDA Civic Type R EP3

ABP purchased an EP3 Type R back in 2001 with the sole aim of developing a full range of tuning parts. We offer exclusive ranges of suspension, brake and performance parts that we believe are the very best available. 10 years on the EP3 is still a great car and more affordable than ever so with a few choice mods the tuning world is your oyster...



EXHAUSTS

PIPER ABP exclusive Single-box cat-back stainless steel exhaust system.....	£349.00
These exclusive to ABP Piper single silencer systems are quite simply a must have. Superb fit, beautiful quality, amazing soundtrack and good power gains. System has a 64" oval tailpipe.	
PIPER Twin-box cat-back stainless steel exhaust system As above but with 2 silencers - same power with less sound!.....	£399.00
PIPER Stainless Steel Race exhaust manifold & stainless de-cat pipe.....	£498.00
PIPER Stainless Steel Race exhaust manifold & 200CEL Sports Cat.....	£678.00

Independent rolling road tests show an incredible increase of +22BHP using a PIPER manifold, de-cat and exhaust system on the EP3 Type R!

DC SPORTS Stainless steel SC3 cat-back exhaust system (4" round tip).....	£430.00
DC SPORTS Stainless steel SHORTY exhaust manifold (uses original cat).....	£375.00
DC SPORTS Stainless steel RACE exhaust manifold (removes catalyst).....	£395.00
All DC Sports items are beautifully crafted in polished stainless steel and offer fantastic looks and power gains.	
The SC3 system comes with a removable silencing baffle ideal for track days.	
O2 simulator (removes ECU light with race manifold fitted).....	£70.50
HKS Hi Power 409 cat-back exhaust system (120mm angled tailpipe).....	£471.90
Stunning JAP style exhaust system with removable silencing baffle and polished 120mm tailpipe	
SUPERSPRINT Stainless Steel straight through 8-pipe.....	£204.00
ENERGY SUSPENSION Up-rated engine mount insert bush kit.....	£26.00
Essential when using any modified exhaust manifold. These also aid traction & prevent wheel hop.	

FITTING AVAILABLE ON ALL PRODUCTS / UK & WORLDWIDE DELIVERY SERVICE

AIR FILTERS

K&N Sports air filter replacement element (lifetime warranty).....	£49.00
K&N 571 Air filter kit.....	£109.00
K&N Typhoon air filter induction kit (wrinkle red finish intake pipe).....	£150.00
AEM CAI Cold Air Induction kit (filter relocated behind front bumper) +15BHP.....	£245.00
AEM V2 Air Filter Induction kit (Unique dual plenum intake pipe) +18BHP.....	£265.00
PIPERCROSS VENOM Sports air filter kit (fully enclosed air box system).....	£175.00

Intake kits make a massive difference to the EP3 Type R offering anything up to +18BHP power gains.

Choosing the right combination of exhaust system and filter kit can add up to +25 BHP power improvements!

SUSPENSION

EIBACH ABP Exclusive -30mm lowering spring kit.....	£150.00
These are the very best springs you can buy for the EP3. Offering the ultimate in looks, handling, reduced roll and better ride quality there really are no downsides.	
EIBACH Pro-Kit -15mm lowering spring kit - All the advantages of our -30mm kits but with less lowering!.....	£159.00
EIBACH Front adjustable camber bolts (essential on lowered cars).....	£25.00
EIBACH Rear fully adjustable camber bolts (to get the very best handling).....(pair)	£135.00
BILSTEIN B4 Shock absorber kit (front & rear shocks).....(set 4)	£385.00
BILSTEIN B8 Sports up-rated shock absorber kit (front & rear shocks).....(set 4)	£655.00
BILSTEIN are arguably the Worlds best shock absorbers, developed on the Nurburgring they offer fantastic chassis control without the extremes of coil-over set-ups. Simply the best real World suspension solution.	
TEIN S-Tech lowering spring kit -20mm.....	£228.00
TEIN BASIC coil over suspension kit (adjustable height only).....	£708.00
TEIN Superstreet coil over kit (adjustable height & damping).....	£804.00
TEIN Superstreet coil over kit with upper mounts (adjustable height & damping).....	£1,080.00
EIBACH 15mm Pro-Spacer kit (improves looks, steering feel & high speed stability).....	£108.00
JDM Rear Anti Roll Bar (including bushes).....	£102.50
E-TECH front polished alloy strut brace.....	£87.50
E-TECH front wide-bar lightweight alloy strut brace.....	£170.00
ABP Fast Road suspension geometry set-up (including front camber bolts).....	£155.00
This set up in ABP's workshop improves the EP3 massively. Improving turn in, reducing under-steer and offering greatly improved feel & handling. A MUST HAVE MODIFICATION.	

FITTING AVAILABLE ON ALL PRODUCTS / UK & WORLDWIDE DELIVERY SERVICE

BRAKES

STOPTECH Fast Road Front brake pads (set).....	£49.00
STOPTECH Fast Road Rear brake pads (set).....	£38.00
STOPTECH Front Sport Stop Grooved brake discs (pair).....	£190.00
STOPTECH Rear Sport Stop Grooved brake discs (pair).....	£140.00
POWERSLOT Front 350mm Big-disc conversion kit.....	£355.00
Kit uses original caliper and offers superior looks & braking with excellent 350mm discs. Kit comes complete with 350mm discs, caliper relocation brackets and fitting kit.	
STOPTECH Touring 300mm 4-POT Brake conversion kit*.....	£995.00
These new budget 300mm kits use a unique directional veined 300mm grooved disc with the ST41 4-pot caliper. Kit comes complete with discs, calipers, pads, hoses and fitting kit. This kit looks great and performs even better!	
EIBACH 15mm Pro-Spacer kit* (required to fit Touring kit behind OE Honda wheels).....	£108.00
STOPTECH BBK 328mm Brake caliper conversion kit.....	£1,450.00
The legendary Stoptech Big Brake Kit is simply awesome in every way. Using 2-piece 328mm discs and ST40 4-pot calipers the performance on offer from this kit is unreal. Essential for ultra fast road or serious track use. Kit comes complete with 2-piece 328mm discs, alloy bells, calipers, pads, hoses and fitting kit. This kit fits behind the original Honda 17" alloy. Choice of Red or Black calipers	
FERODO DS2500 Front high performance brake pads.....	£99.50
FERODO DS2500 Rear high performance brake pads.....	£91.50
EBC Red Ceramic Front high performance brake pads.....	£87.00
EBC Red Ceramic Rear high performance brake pads.....	£58.00
EBC Turbo Groove drilled & grooved front brake discs.....(pair)	£245.00
TAROX G88 40-Groove high performance front brake discs.....(pair)	£217.00
GOODRIDGE Stainless steel 4-line brake hose kit (zinc plated unions).....	£62.00
MOTUL RBF600 High performance brake fluid (1/2 LT).....	£15.50
FOLIATEC Caliper paint kit (various colours).....	£24.90

OTHER ITEMS

HKS IRIIDIUM spark plugs (set 4).....	£82.00
NEUSPEED Short Shift gear lever kit.....	£95.00
EXEDY OE 3-piece Clutch kit - Fitting service available.....	£195.00
PIAA Headlight bulb upgrade kits (Set of 4 bulbs - sidelight, dip/main beam).....	from £65.00
PIAA Silicone front wiper blade kit (pair of silicone wiper blades).....	£43.00
YOKOHAMA 215/40X17 PARADA Spec 2 tyre.....	£92.00
YOKOHAMA 215/40X17 ADVAN NEOVA A008 tyre (ultimate track day tyre).....	£156.00
ABP recommend changing the original 205/45X17 tyres to the better 215/40X17 size. Wider, slightly lower profile these tyres offer improved handling, grip, feel and they're cheaper!	

← SERVICING - See FN2 Listing

01270 567 177

NEXT DAY DELIVERY

PHONE TODAY FOR NEXT DAY DELIVERY* or WHY NOT CALL INTO OUR SHOWROOM TO COLLECT OR LET US FIT THE PARTS FOR YOU IN OUR FULLY EQUIPPED ON-SITE WORKSHOP

* Orders must be placed before noon and are only available on stock items (excluding Sunday). Please phone for postage prices on your order

~ EXPORT ORDER ARE WELCOME ~

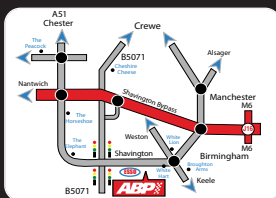
Orders can be placed by phone with a credit/debit card for immediate despatch. Postal orders and cash are also acceptable. At ABP full security checks are made to ensure the validity of the credit card holder. All attempted credit card frauds are reported to the police.

www.abpmotorsport.co.uk

~ ALL PRICES INCLUDE VAT ~

We reserve the right to change prices in accordance with certain manufacturers. Rights of cancellation details supplied. Prices are correct at time of going to press. E&OE.

How to find us



ABP Motorsport
416 Newcastle Road, Shavington,
Crewe, Cheshire CW2 5EB
Fax 01270 568177
sales@abpmotorsport.co.uk

Opening Hours
Mon-Fri 8.30am - 6.00pm
Sat 9.00am - 3.00pm

WORKSHOP FITTING SERVICE

Our fully equipped modern workshop allows us to carry out a full range of servicing, maintenance & performance modifications in-house. Staffed by fully qualified enthusiastic technicians trained to the highest standards we are able to skilfully fit, set-up, tune and optimise any modifications to get the best out of your car - This is our passion! From regular manufacturer spec servicing, MOT testing, performance tuning & chassis development to full on track day preparation we can offer the complete service.

ABP's workshop carries Cheshire County Council Trading Standards approval assuring you of the highest quality and 1st class customer service. ABP achieved Trading Standards first perfect 100% mystery shop result in August 2010.

ABP were awarded CAT magazines coveted title of National Garage of the Year in both 2010 and 2011. An award we all take very seriously and testament to our very high standards.

- Performance Parts Installation
- Manufacturer Spec Servicing
- Suspension Fitting Specialists
- Wheel alignment & Suspension Geometry
- Maintenance & Repairs
- MOT Testing Station
- Customer Supplied Parts Fitted
- Clutch fitting
- Cam / Timing Belts Replaced
- Fully Skilled & Experienced Staff
- Trading Standards Approved
- National CAT Garage of the Year 2010 & 2011



SERVICING AND MAINTENANCE

We offer a full servicing & Maintenance service to our customers. ABP Service all cars to manufacturer specification therefore maintaining warranties & correct service history!

The advantages our service gives you over & above the dealers (or stealers!) are:

- Enthusiastic passionate staff
- Guaranteed level of personal service
- Full range of services including modifications
- Competitive Labour prices
- All makes / models worked on
- No problems with imports
- One-Stop tuning shop

Full range of servicing / maintenance available including timing belts, clutches, brakes, suspension & steering work.

Please phone with your exact requirements and we will be happy to advise and give competitive prices.

WHEEL ALIGNMENT & SUSPENSION GEOMETRY

- Vague Steering?
- Steering wheel miss-aligned?
- Excessive or uneven tyre wear?
- General poor handling?



Lots of Japanese cars have fully adjustable wheel alignment, castor adjustment & camber adjustment both front and rear. Manufacturer's geometry specifications allow for very generous tolerances which can lead to poor handling, excessive tyre wear, vague steering feel and even reduced MPG!

ABP can 'blueprint' your suspension geometry settings allowing you to benefit from maximum steering response & improved grip along with improved tyre life and increased economy. We have the latest computerised 4-wheel alignment equipment and are able to optimise the geometry settings on your car.

ABP can also offer unique FAST ROAD settings for many cars offering improved handling and turn in by introducing more extreme alignment practices. We can also set your geometry up to your own individual spec for track use or drifting etc.

Please phone for exact prices on your car & prepare to feel the differences immediately.

Examples

Full suspension 4-wheel alignment check and report (no adjustment)	£55.00
Front Wheel Alignment check & adjust.....	from £35.00
Front & Rear Wheel Alignment check & reset	from £75.00
Subaru Impreza Turbo / STi / WRX & Mitsubishi EVO 5-10	£135.00
Check and reset front & rear Wheel Alignment & Camber angles to Fast Road spec	
HONDA S2000 Check and reset front & rear Wheel Alignment; Camber and Castor angles to Fast Road or Honda spec.....	£140.00
Honda Civic Type R EP3 ABP Fast Road suspension geometry set-up (Including front camber bolts)	£155.00
This set up includes supplying & fitting adjustable front camber bolts, reset the front & rear Wheel Alignment & Camber angles to ABP Fast Road spec. These improve the EP3 massively. Improving turn in, reducing under-steer and offering greatly improved feel & handling and reduced tyre wear!	
Honda Civic Type R FN2 ABP Stage 1 Fast Road suspension geometry set-up (Including camber bolts)	£135.00
This set up includes supplying & fitting adjustable front camber bolts, reset the front & rear Wheel Alignment & Camber angles to ABP Fast Road spec. These improve the FN2 massively. Improving turn in, reducing under-steer and offering greatly improved feel & handling.	
Honda Civic Type R FN2 ABP Stage 2 Fast Road suspension geometry set-up (Including bolts & rear shim kit)	£224.00
As above but stage 2 also includes removing the rear hubs, fitting correct camber & toe shims (included in price) and setting both front and rear geometry to fast road spec.	

SUSPENSION AND LOWERING

ABP can provide various levels of suspension tuning for all Japanese vehicles. We offer a full fitting service on over 7 manufacturers lowering spring options, numerous sports shock absorbers and many complete adjustable suspension kits including fully adjustable coil-over kits.

Spring kits available from EIBACH, TEIN, SPAX, H&R, GMAX, KW and Pi

Shock Absorbers available from KONI, BILSTEIN, KW, SPAX and EIBACH

Suspension kits available from EIBACH, KONI, BILSTEIN, TEIN, KW, H&R, SPAX & GMAX

Lowering spring kits supplied & fitted

Sports suspension kits supplied & fitted

Fully adjustable coil-over suspension kits supplied & fitted

Phone ABP for a price on either lowering or making your car 'Really Handle!'

FITTING PRICES

ABP can fit all of the parts that we sell and we are also happy to fit customer provided parts in our workshop.

Here are some general fitting prices for our workshop:

Sports exhaust systems fitting	from £55.00	Wheel alignment checks	from £55.00
Performance air filter induction kits fitting	from £55.00	Timing / Cam belts fitting	from £82.50
Brake discs & pads fitting	from £82.50	Clutch kits fitting	from £165.00
Big Brake conversion kits fitting	from £110.00	Pre / Post Track day check-over	from £55.00
Suspension kit fitting	from £165.00		

Please phone ABP's workshop on 01270 567177 for accurate prices on fitting parts to your car or to arrange a workshop booking time.

ALL CARS CATERED FOR - PLEASE CALL

All labour prices do not allow for seized, broken or damaged components on your car.

STOPTECH



ABP are an official UK importer of STOPTECH brakes and offer the full range of high performance brake pads, brake discs and the AWESOME caliper conversion kits. Used extensively in Time Attack series cars these kits are reputed to be the best available. Full range of 4 & 6 pot kits available for most Japanese cars please call for prices to make your car STOP!

STOPTECH High performance brake pads.....	from £38
EVO 5-9 & Impreza STi FRONT & REAR brake pad set	£118
STOPTECH High performance grooved brake discs.....	from £140
Mitsubishi EVO 5-9 Front grooved brake discs.....	£225
Mitsubishi EVO 5-9 Rear grooved brake discs.....	£195
Honda Civic Type R FRONT & REAR grooved brake disc kit.....	£330
STOPTECH Big Brake Caliper conversion kits.....	from £995
Honda Civic Type R EP3 & FN2 touring kit (300mm).....	£995
Honda Civic Type R EP3 & FN2 (4-pot 328mm).....	£1,450
Mitsubishi EVO 7-10 (4-pot & 6-pot kits).....	from £1,550
Nissan Skyline R32, 33, 34 (4-pot & 6-pot kits).....	from £1,550

Full range available for Honda, Lexus, Mazda, Nissan, Subaru & Toyota

AEM



AEM offer the very best intake kits for your Japanese car. AEM lead the way in air filter technology and now use the revolutionary DRYFLOW filter units. ABP are an official AEM importer dealing directly with the manufacturer!

• Massive Range stocked • Excellent power gains • Call for prices

Cold Air Intake Kits

Honda Integra Type R DC2	£269.00
Honda Integra Type R DC5	£255.00
Subaru Impreza inc. STi (2001 on)	£262.00
Subaru Impreza Inc STi (2008 on) +308HP	£255.00
Mazda MX5 (2006 on)	£275.00
Mitsubishi EVO 10 +168HP	£275.00

Short Ram Intake Kits

Mitsubishi EVO 7, 8, 9 (inc. heat shield)	£235.00
Nissan 350Z (inc. heat shield)	£315.00
Subaru Impreza inc. STi (2001 on)	£169.00
V2 Dual Plenum Air Intake Kits	
Honda S2000	£275.00
Honda Civic Type R EP3 & DC5 Integra.....	£265.00

DC



ABP are official importers UK importers of DC Sports products direct from the USA. Products include ceramic coated & stainless steel exhaust manifolds and stainless steel exhaust systems.

DC Sports Exhaust Manifolds

Honda Civic Type R EP3 Stainless Steel Race manifold - (These fully polished manifolds also remove the catalyst)	£395.00
Nissan 350Z Ceramic Coated tubular sports manifolds (pair)	£475.00
Mitsubishi EVO 5-9 Large Bore Stainless Steel Race Manifold	£399.00

DC Sports SCS Stainless Steel Exhaust Systems

Honda Integra Type R DC2	£399.00
Honda Integra Type R DC5	£430.00
Honda Civic Type R EP3 (inc. removable baffle).....	£430.00
Mitsubishi EVO 7, 8 & 9	£449.00
Nissan 350Z (Sounds like a 911 Race car!)	£699.00
Subaru Impreza (2002 on) inc. STi & WRX	£425.00

FITTING AVAILABLE ON ALL PRODUCTS / UK & WORLDWIDE DELIVERY SERVICE



EIBACH produce the Worlds finest springs with quality second to none. Not only do they improve the looks of the car but they also offer better handling with improved ride quality. ABP offer the full range of EIBACH suspension products available including lowering spring kits, suspension kits, alignment products and wheel spacer kits. PLEASE CALL



Bilstein produce a massive range of shock absorbers and suspension kits for Japanese cars including B4 replacement dampers, B6 & B8 sports shock absorbers and fully adjustable coil over suspension kits. All Bilstein development work is carried out on the legendary Nurburgring.



ABP can supply and fit the full range of HKS tuning products from Japan. HKS offer some of the finest quality tuning parts available in the World. Products available include sports air filter kits, sequential dump valve kits, iridium spark plugs, exhaust systems, intercoolers, boost controllers, suspension, cams, electronics and more. PLEASE CALL



K&N were the original sports air filter manufacturer and offer the largest choice for Japanese cars. They make sports air filters for every car including F1 and WRC teams.

- Replacement elements from £29
- S71 induction kits from £64.00
- Typhoon induction kits from £13



ABP stock the full range of PIAA products including bulbs, silicon wiper blades, lamps and vision products. PIAA produce a massive range of lighting products to suit all applications and they are used extensively in motorsport throughout the World. Don't confuse PIAA bulbs with the cheaper brands out there as PIAA are THE BEST.

- LED Sidelight bulbs from £24.50 • Headlight bulbs from £35.00 • Silicon wipers from £21.50



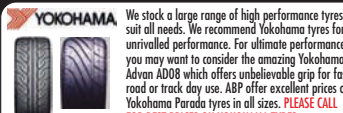
We offer the full range of TEIN suspension to suit all needs & budgets. TEIN offer kits to suit road, track day, drift or competition use. Choose from a lowering spring kit to a fully adjustable coil over kit with adjustable alloy top mounts. Kits available for Honda, Lexus, Mazda, Mitsubishi, Nissan, Subaru & Toyota.

- Lowering Springs from £155
- Coil-Over Kits from £660

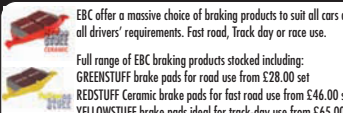


Tarox G88 40-Groove brake discs offer awesome braking performance under the most extreme conditions. Unique heat treatment process makes these one of the strongest discs available. Full range of uprated brake discs, brake pads and big caliper conversion kits available for most Japanese cars. PLEASE CALL

- Fast Road brake pads from £49.00
- G88 40 Groove brake discs from £159.00
- TAROX big brake caliper kits from £1,250



We stock a large range of high performance tyres to suit all needs. We recommend Yokohama tyres for unrivalled performance. For ultimate performance you may want to consider the amazing Yokohama Advan A008 which offers unbelievable grip for fast road or track day use. ABP offer excellent prices on Yokohama Parada tyres in all sizes. PLEASE CALL FOR BEST PRICES ON YOKOHAMA TYRES



EBC offer a massive choice of braking products to suit all cars and all drivers' requirements. Fast road, Track day or race use.

Full range of EBC braking products stocked including: GREENSTUFF brake pads for road use from £28.00 set REDSTUFF Ceramic brake pads for fast road use from £46.00 set YELLOWSTUFF brake pads ideal for track-day use from £65.00 set TURBOGROOVE grooved & drilled brake discs from £140.00 pair



ABP offer the full range of FERODO high performance brake pads. The DS2500 range is ideally suited to extreme road use and is an ideal track day pad. Massive range available to suit all popular Japanese high performance cars. Other compounds are available for more extreme track use or full race applications.

- Honda Civic Type R EP3 & FN2 Front DS2500 Brake pads £99.50
- Honda Civic Type R EP3 & FN2 Rear DS2500 Brake pads £91.50

PLEASE CALL TODAY FOR PRICES/INFORMATION ON ALL THE ABOVE PRODUCTS





This is the first properly converted RX-7 engined RX-8 in the UK, probably Europe, maybe even the world. Many have tried, some even claim to have achieved it. You might have seen video clips on the internet of the cars in question, or read about an RX-8 in another mag that claimed the title. The truth is they were tricked. Don't take our word for it, though. Take the word of Clive Haynsford, a man who could easily be referred to as 'Mr Rotary'.

Founder of the Rotorstock series of Mazda Rotary shows and co-founder of the Mazda Rotary Club (alongside Glen Butcher), Clive's list of credentials goes on and on. Including 20-years of successful motorsport that people who know of Clive by reputation might not be aware, including drag racing championships.

In terms of being the first to successfully perform the engine conversion, the keyword is 'functionality'. Do those other cars have a 13B-REW engine from an FD RX-7 sitting in the engine bay, with everything inside the car working as if the RX-8 Renesis was still there? No. As Clive points out, they have a throttle body controlled by a cable, just like the original FD3S setup. The RX-8's electronics and the RX-7 engine are not talking to each other. They're like housemates who occupy the same space but don't get along.

'That's not the point!' some of you might cry. Perhaps. An engine's main purpose is to propel the car forward, so if that's working, then we take your point. However, isn't it much better when all the electronics the car was designed with still work? Clive certainly think so, and his is a racecar.

In fact, the 'proper' conversion came about largely because of racing. He built the car to the Nippon Challenge Super GT regulations, which

WORDS: DAN GOODYER PICS: DAN SHERWOOD

IN A GAME OF WHO DID
WHAT FIRST, THIS RX-8 MISSED
OUT ON THE TITLE OF THE
FIRST RX-7 ENGINED RX-8 IN
THE UK. OR DID IT...?

FIRST THE WORST, SECOND THE BEST?

**'THE REAR WING WAS
ORIGINALLY MUCH
BIGGER. THIS IS THE
CUT-DOWN VERSION!'**



HOW DID HE DO IT?

A LARGE CHUNK OF THE MAGIC IN GETTING THE RX-7 ENGINE TO TALK TO THE RX-8 ELECTRONICS INVOLVES THE THROTTLE BODY. THE RX-7 USES A CABLE-TYPE WHILE THE RX-8 IS ELECTRONIC, OFTEN REFERRED TO AS FLY-BY-WIRE. CLIVE'S SOLUTION IS A RACING BEAT LOWER INLET MANIFOLD INTENDED TO ALLOW THE FITMENT OF WEBER CARBURETTORS. THIS IS ATTACHED TO A CUSTOM UPPER INLET MANIFOLD THAT WAS MOCKED UP BY POWERGAINS BEFORE BEING FINISHED OFF BY BRISE, A LOCAL ELECTRICAL ENGINEERING COMPANY. IN SHORT, THE RX-8 ELECTRICAL THROTTLE BODY IS NOW CONTROLLING THE FD RX-7 ENGINE. WITH SOME OTHER TOP-SECRET TWEAKS, THE DIALS, GAUGES AND ALL THE ELECTRONIC GIZMOS WORK AS IF THE ENGINE WAS IN THERE FROM DAY ONE, TOO

states that you can only run a driver aid if it was factory-fitted to the car. He uses them, too. Clive calls on these goodies while racing his 400bhp RX-8 around the country in the racing series specifically for drivers of tuned Japanese cars. Clive adds: 'It makes all the difference. Take the DSC stability control, for example. I've used this in competition in wet conditions and there's no doubt it made me faster, and far less likely to go off the track, too. People have told me it interferes too much. I tell them they're not driving smoothly enough then! It's a great system but it won't drive the car for you. It should only trim the edges of your driving. If it's coming in all the time, then it's probably your driving at fault, rather than the traction control.'

Don't go thinking that this is a big budget build, though. The real investment has been time. Clive adds: 'I wanted to prove that you could build a very fast car with a low budget and basic tools – ninety per cent of the car was built in a dark garage with no electric round the corner from our premises in North Kent.' You wouldn't expect that to look at it. It looks every inch a 'proper' racecar, with its wild colour-scheme, extensive rollcage and that unusual double rear wing setup.

'A friend of mine built that wing,' laughs Clive before adding: 'The lower boot spoiler is an eBay job but it didn't really affect the handling. I found the back-end was really loose on track, it needed something to push the rear of the car into the Tarmac. Steve at DS Engineering asked me if he could make a large wing for it. When he showed me, it was massive! Instead of removing the original wing, Steve had built it over the top of the eBay spoiler. His creation was very impressive, but unfortunately too high and wide for the Nippon Challenge regs. So this is the cut-down version, believe it or not. The upper Gurney flap can be adjusted, too. It really works, I'm still amazed how much more stable and grippy the rear end is now.'

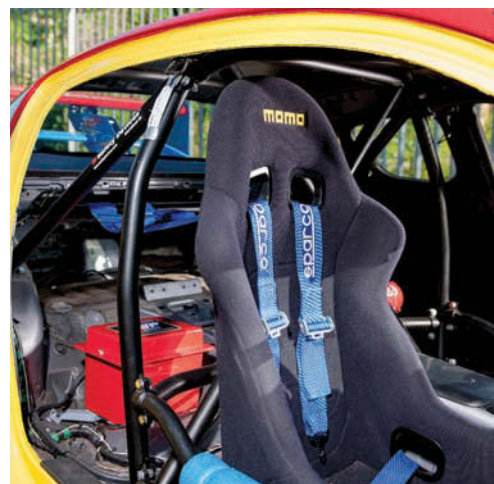
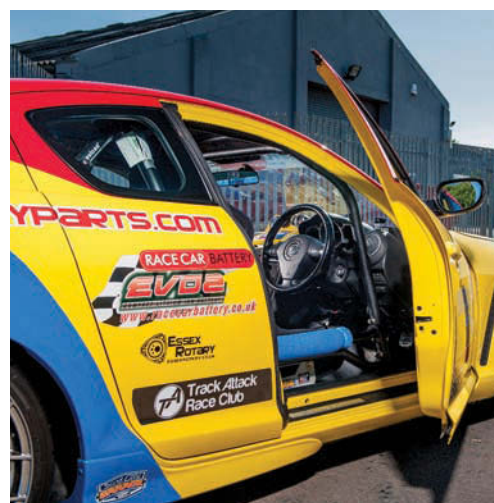
Another key feature in the transformation of the handling is the

suspension, which has been supplied through a sponsorship from Tein. This means he's been able to fit their full Monoflex kit with the EDFC in-car controller. Clive explains: 'The Electronic Damping Force Controller is brilliant. If the weather or track conditions change then I can alter how the car behaves at the touch of a button.' Another sponsorship that Clive is immensely proud of is the support given from the members of the Mazdarotaryclub and RX8OC who wanted to be involved with the car. As a tribute to all who helped out, their names are written across the rear wing. Nice touch.

All the supporting parts have been upgraded, too. The original suspension arms remain in place but have been reinforced with Energy Suspension bushes. While the anti-roll bars have been replaced with much thicker Racing Beat items front and rear, with adjustable end links. In fact, Clive is Racing Beat Europe, supplying Racing Beat parts to customers for the past seven years. He's also the owner of Mazda Rotary Parts, as well as running www.racecarbatter.co.uk. It makes you wonder how he finds time to race at all?

It's worth noting that tiny battery, actually. It's a 16-cell lithium battery, tiny in size and much lighter than a conventional one, it's amazing how it's still plenty powerful enough. The same goes for the alternator, which is a small 'race' item with a custom-made mounting bracket. This caused another headache regarding regulators. Another problem in a long list that needed to be solved to make this a true, 100% integrated engine swap.

The fuel system is equally well thought out. Inside the car is a really neat setup involving a custom swirl pot and several pumps. Interestingly, it uses the original fuel tanks. The primary reason for this is the two RX-8 'saddle tanks' are mounted pretty much in the middle of the car, which is great for weight distribution. The cooling system has been upgraded, too, with a 'v-mount' intercooler and radiator setup at the front of the engine bay. With all these goodies on board, and considering the



HEATING THE WAY THE WINDSCREEN ON CLIVE'S RX-8 MIGHT LOOK ORIGINAL BUT IT'S ACTUALLY A ONE-OFF. HE WANTED TO REMOVE THE HEAVY AIR-CON AND HEATER SYSTEMS BUT THAT MEANT FINDING A HEATED SCREEN FROM SOMEWHERE. AFTER SEARCHING AROUND WITHOUT SUCCESS, HE AGREED TO HAVE ONE SPECIFICALLY MADE BY GLASS SPECIALISTS PILKINGTON USING THE SAME SPEC THEY USE FOR THEIR MCLAREN P1 SCREENS. IT WASN'T CHEAP, BUT CLIVE SAYS THE WEIGHT SAVING IS SIGNIFICANT



size of the turbocharger, shouldn't this engine be making more than 400bhp?

'400bhp is our maximum in Super GT,' explains Clive before adding: 'The good thing though is that we have been able to effectively dial back the power and tune down to the 400bhp limit. The result is a really linear power delivery. It doesn't spike anywhere, so that helps maintain traction, and it pulls hard all the way to the redline in typical rotary fashion. The key to the power is the porting that has been carried out by Powergains Motorsport. They've been extremely helpful throughout the build. I can't share much info about the porting they carried out, but I can say it's their own take on a large street-port. Having driven lots and lots of rotaries, I can honestly say I'm very impressed with this engine.'

The turbo itself is a chunky GT40 mounted on a custom exhaust manifold made by Powergains. The manifold and downpipe have been Zircotec-coated, and feed into a Racing Beat REVi 3in exhaust system. One of the things you instantly notice about this car is how quiet it is. Don't be mistaken, it's still a loud car, but it's much quieter than other highly-tuned rotaries we've heard in the past. Clive explains: 'One of the problems with running


a rotary at a race track in the UK is noise, so that was definitely a conscious decision to quieten it as much as possible. The Racing Beat exhaust is great for that because it really reduces the noise level without being restrictive.'

It does sound great, though. Clive says the driving experience is very different with the turbocharged 13B too: 'With the original Renesis engine you felt like you had to keep it at the top end of the revs all the time. With the turbo engine it feels more like a GT racer. It's got power wherever and whenever you need it. The engine management is an Adaptronic ECU, made in Australia. They aren't particularly common over here yet, but it's a fantastic system. So after an initial set-up by rotary mapper Jaydee, the boss of Adaptronic heard about the car and wanted to know more. Since then, he has effectively taken over the mapping of the car!'

It certainly looks the real deal. Clive has fully lightened the car, cutting out the rotor-shaped bulge in the bonnet for cooling and ditching the front windows altogether! He's also converted the rear-end to R3 spec and the car looks much better for it, much beefier from behind. The mixture of Dotz and Enkei wheels work well together and

are wrapped in Yokohama A048 rubber. Clive explains why: 'I'd heard good things about them and I've found they grip and grip, no matter how hot they get. I've tried some of the popular alternatives and they either go off after a couple of laps or don't have the grip in the first place.'

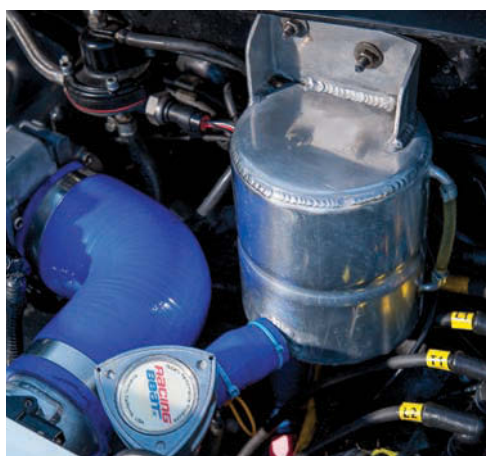
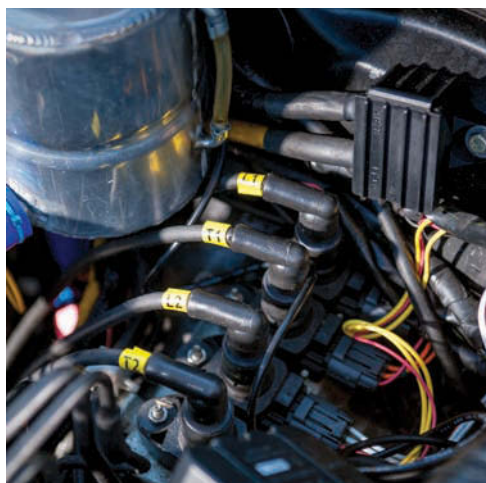
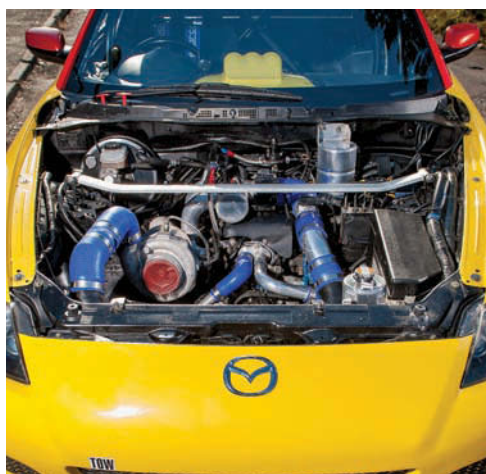
Stopping power is there, too, thanks to a set of Racingbrake four-pot calipers up front, grooved discs and track-spec XT970 pads all round. Clive hasn't fiddled about with bias valves partly because the upgrades have been planned so the balance is there. Also because it would be another step away from retaining the originality of the car. Which is largely what this project has been about.

When you look at this car from a distance, it looks every inch a racecar. When we drove to our photoshoot location in convoy, it was amusing to check the rear view mirror and see how many people stop and stare at this RX-8. Tear away the wild colour-scheme and large wing, however, re-fit the factory interior and you'd have a car that would look and function just like an original RX-8. Just a very fast one. In the race to make that engine-swap dream a reality, Clive is definitely on the top step of the podium. 





RX-PHWOAR!
WHEN HE WAS A 15-YEAR-OLD MAZDA APPRENTICE MECHANIC AT BOURNE GARAGE, CLIVE SAW HIS FIRST RX-4. IT WAS LOVE AT FIRST SIGHT. MANY YEARS LATER HE GOT THE OPPORTUNITY TO BUY ONE, QUITE UNEXPECTEDLY. AS CO-FOUNDER OF THE MAZDA ROTARY CLUB, CLIVE OFTEN GETS PHONE CALLS ASKING FOR HELP AND ADVICE. HE'S HAPPY TO GIVE IT. ONE SUCH CONVERSATION TURNED FROM A REQUEST FOR ADVICE TO AN OFFER TO BUY THE CAR. THE OWNER DIDN'T WANT IT TO GO TO SOMEONE WHO WOULD TRY AND SELL IT ON FOR PROFIT. YEARS LATER CLIVE HAS RESTORED THE CAR, WHICH WITH THE EXCEPTION OF A RESPRAY IN HIS TRADE-MARK YELLOW (A LEGACY OF HIS RACING HISTORY) AND A SET OF POLISHED 8X16IN WHEELS, IS EXACTLY THE SAME AS THE DAY IT LEFT THE FACTORY. EVEN WITH A RELATIVELY UNDERPOWERED CARB-FED 12A ROTARY UNDER THE BONNET, WE MUST ADMIT WE FELL A LITTLE BIT IN LOVE WITH IT!



TECHSPEC

ENGINE

13B-REW rotary turbo engine conversion from an FD3S Mazda RX-7, large street-port by Powergains Motorsport, 2mm Goopy apex seals, Adaptronic ECU, Garrett GT40 Turbo mounted on Powergains Motorsport exhaust manifold, TiAL Sport 60mm external wastegate, Zircotec-coated exhaust manifold and downpipe, Racing Beat Revi 8 3in cat-back exhaust system, Racing Beat lower inlet manifold designed for Weber carburettor conversion, custom upper inlet manifold with a ported 80mm RX-8 electronic throttle body, V-mount setup featuring a large intercooler with APEXi core and custom end tanks and a modified Koyo radiator designed for an FD3S RX-7, 550cc primary fuel injectors, Bosch Indy Blue 1680cc secondary fuel injectors, Walbro lift pump in stock RX-8 saddle tanks feeding custom swirl pot and Bosch 044 pump, OE latest spec Mazda ignition coil packs, HKS Twin Power ignition amplifier, Ballistic EV02 16-cell lithium race battery, custom side-mounted Brise Motorsport lightweight alternator, Davies Craig electric water pump
Power: Limited to 400bhp to meet Nippon Challenge Super GT regulations

TRANSMISSION

6-speed RX-8 gearbox, Clutchnet 'Stage 5' single-plate paddle clutch, Exedy lightweight steel flywheel, factory 'SuperDiff' limited slip differential

BRAKES

(front) 4-pot Racingbrake calipers with 332mm grooved Racingbrake discs (rear) OE Mazda calipers with 303mm grooved Racingbrake discs, Racingbrake XT970 pads front and rear, Racingbrake braided lines

SUSPENSION

Tein Mono Flex coilovers with EDFC ACTIVE (electronic damping force controller), Racing Beat anti-roll bars with Racing Beat adjustable end links, Energy Suspension bushes fitted to all suspension arms, Suspension Geometry by Torque Developments International (TDI)

WHEELS & TYRES

8x18in Dotz Exile wheels with 235/40/18 Yokohama A048 tyres (front) 10x18in Enkei wheels with 265/35/18 Yokohama A048 tyres (rear)

INTERIOR

Safety Devices bolt-in rollcage, Momo bucket seat with Sparco 4-point harness, custom-made heated front screen by Pilkington Glass

EXTERIOR

Mazdaspeed replica nose cone, lightened bonnet with raised section cut out, stripped-out interior and lightened doors, Mazda R3 rear bumper and light conversion, aftermarket boot spoiler, custom rear wing and front splitter by D.S. Engineering

THANKS

Members of Mazdarotaryclub and RX8OC, Powergains Motorsport, Tein UK, D.S. Engineering, Essex Rotary, Palmer Bros, Racing Beat USA, Hayward Rotary plus Andy and Elliot for Adaptronic support

RACING BEAT

Europe

Performance Components

MADE FOR MAZDA

Designed and built in California - AVAILABLE HERE

Official Sponsors of the MX-5 Supercup

W: www.racingbeateurope.com E: sales@racingbeateurope.com T: +44 (0) 1474 777 800



UK Distributor / Warehouse

Tel: +44 (0)1784 493 555

Fax: +44 (0)1784 493 222

Email: sales@glencoeltd.co.uk

Made in the USA

"Fuel Pumps for the Professionals":-

Original Equipment

Formula One

Race Teams

Rally Teams

Military



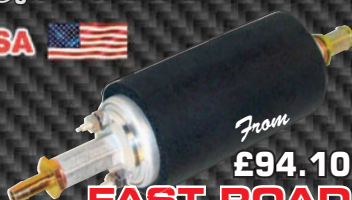
FAST ROAD

'IN TANK PUMP'

UPGRADES

From £56.08

Pump kits..... £60.40



£94.10

FAST ROAD

'OUT OF TANK'
(3 BAR) REPLACEMENT PUMPS

**400
450**

LITRES / HR

**2 YEAR
WARRANTY**

EXTREME FUEL

For

**EXTREME
POWER**

MOTORSPORT

400 LTR/HR

Upto 600 BHP

Pt.No. GST400 (PUMP ONLY)

GST400K (PUMP KIT)

£92.40

MOTORSPORT

450 LTR/HR

Upto 750 BHP

Pt.No. GST450 (PUMP ONLY)

GST450K (PUMP KIT)

£112.00

**190
255**

LITRES / HR

MOTORSPORT

'IN TANK PUMP'

350 BHP £65.80

500 BHP £74.64

Kit prices From £75.90



325

LITRES / HR

MOTORSPORT

'OUT OF TANK'

325 LTR / HR

5 BAR FUEL PUMP

(180 LTR / HR @ 3 BAR)

From
£99.50



Prices exclude VAT @ 20%

www.glencoeltd.co.uk

01392 811 601

www.helcarkits.co.uk



HEL
We'd like to tempt you with a set of seriously sexy new stainless steel brake lines from HEL. Designed to add some real 'Rock and Roll' to your driving, HEL's braided Teflon hose lines are seductively wrapped in a tight, shiny PVC outer sheath to offer the ultimate protection... allowing you to get on with the business of raising some Hell. Used in competition by the fastest racers on earth, HEL lines offer incredible stopping power over O.E. systems, and real feel on the very limit - meaning quicker times, lap after lap. In pure performance per £ terms these hoses represent the single best aftermarket upgrade you can make to your car. And real 'Bolt-on' fitting means you're soon up and running...
and ready to drive like the devil.



Go to Hel.

Angel



Looking for
heavenly braking?



HEL are delighted to announce the divine creation of a heavenly range of superior braided stainless steel brake line kits. Designed to add beauty to your vehicle, the braided Teflon hose lines are sensibly finished with a colour coded PVC outer sleeve to keep any horrible road grime at bay. The incredible craftsmanship is also backed by a lifetime warranty for extra peace of mind. Proven time and time again to generate more stopping power, and increased feel and control over O.E. systems, HEL lines will make every drive a joy, and give you the reassurance that you can stop quicker and safer than ever in an emergency situation. HEL lines are easy to fit and represent wonderful value for money, making them one of the most prudent after-market upgrades you can make.

With HEL brake lines you really can take your driving to seventh heaven.



www.helcarkits.co.uk

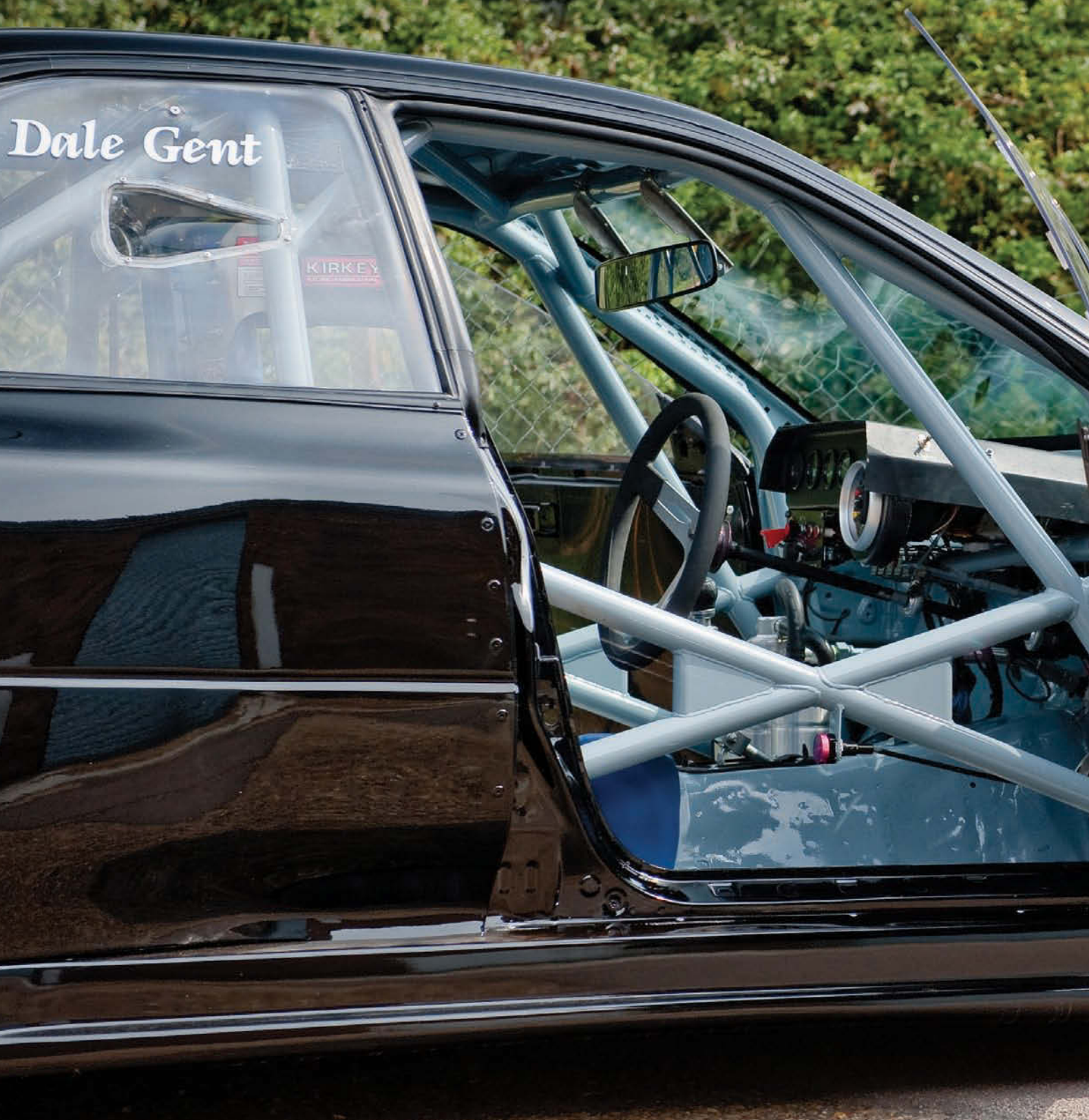
01392 811 601



THE DARK DESTROYER

WORDS: DAN FURR
PICS: DAN SHERWOOD

DESPITE AN APPARENT DESIRE TO RUIN ITS OWN ABILITY TO RACE, DALE GENT'S AWE-INSPIRING SUBARU IMPREZA STI IS HAPPILY DESTROYING THE WILL OF ITS RIVALS AT THE TRACK...



Believe it or not, it was a friend that forced me into racing my modified Impreza,' smirks 31-year-old Japanese car fan, Dale Gent, as we strike up a conversation regarding his stealthy Subaru's impressive appearances at the track. 'He heard me chatting to the event organiser of the Nippon Challenge race series at Brands Hatch. I was asking what I would need to do to make my car eligible to run alongside those of the tournament's established participants. It was a casual enquiry, but I returned home from work the following day to find that my beloved STi had been heavily stripped in an attempt to render it suitable for track action!' he gasps.

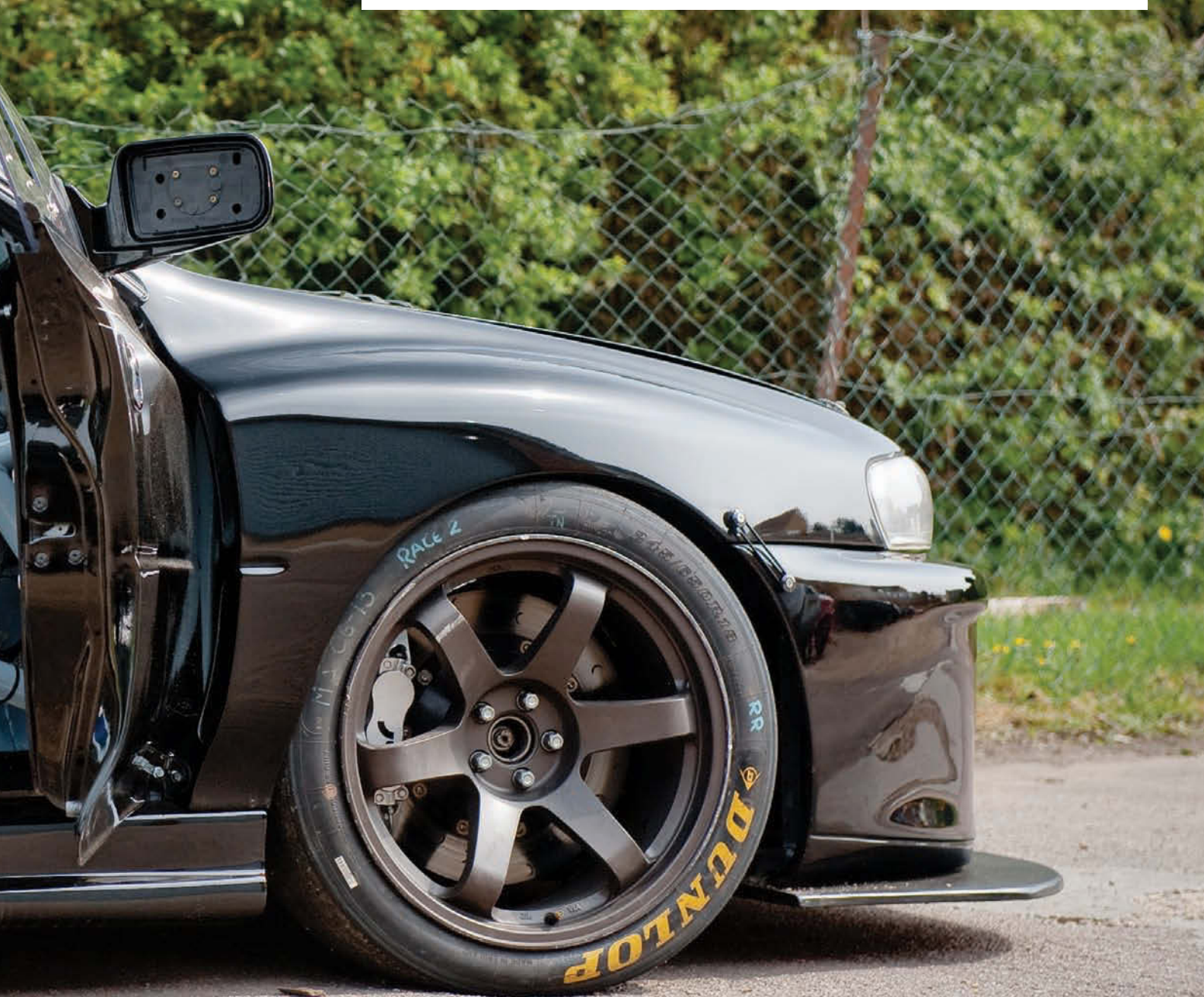
It's fair to say that the majority of us would have had more than a few choice words to colour the air with if a friend had decided to vandalise our pride and joy to the extent that Dale's Impreza had been violated. After all, he hadn't actually committed to entering his black Version 3 into the Nippon ring when his car's seats, door cards and interior trim started to form a pile on the Gents' driveway! Then again, in defence of his well-meaning mate, you might argue that the Berkhamsted-based petrolhead's protracted involvement in competitive

motorsport – coupled with a lifelong love of Subaru – amounted to something akin to a statement of intent!

'I've been involved in banger racing since the age of sixteen,' continues Dale. 'In fact, I've raced all sorts of vehicles, and I've even had a go at piloting buses and lorries around some of the UK's best-loved oval circuits. Additionally, I've driven a number of Ford Sierras in the rear-wheel drive Lightning Rods series,' he adds.

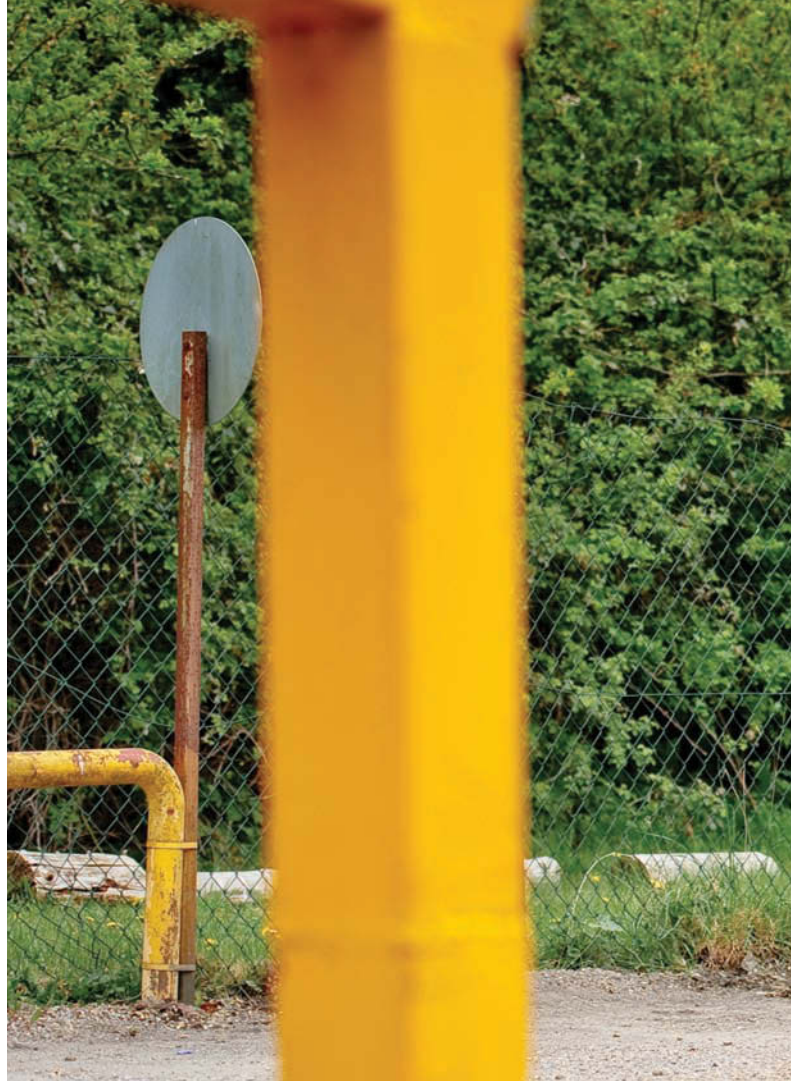
His weekends and evenings might have been spent sat behind the steering wheel of a battered Blue Oval, but the walls of Dale's younger self's bedroom suggested an allegiance to an entirely different brand of car; posters of Subaru Imprezas decorated his den from floor to ceiling, and the adolescent Master Gent vowed to buy himself an example of the legendary Japanese super saloon as soon as funds and insurance premiums allowed.

As a machine operator for his father's construction business, however, a need for a practical load-lugger meant that the Impreza dream would remain on hold for a number of years while a Toyota Hilux and a string of Nissan Navaras passed through Dale's hands. It was the closest that he could get to





**NASCAR CHIC
THE IMPREZA'S
INTERIOR
LOOKS MORE
LIKE THAT OF
AN AMERICAN
NASCAR RACER
THAN
SOMETHING
THAT CAME OUT
OF THE SUBARU
FACTORY. THE
SEAT AND
STEERING
WHEEL HAVE
ALSO BEEN
MOVED
TOWARDS TO
THE REAR TO
IMPROVE
WEIGHT
DISTRIBUTION**



**THOSE IN THE KNOW
RELENTLESS PERFORMANCE IS A FAST-GROWING TRACK AND RACECAR
PREPARATION FIRM THAT OPERATES OUT OF PREMISES IN EAST
CAMBRIDGESHIRE. CO-OWNERS, JAMES MIDDLETON AND ASHLEY
TALBOT, ARE ALSO KNOWN FOR UNDERTAKING START-TO-FINISH
AUTOMOTIVE RESTORATION PROJECTS ON A WIDE VARIETY OF MAKES
AND MODELS. REASSURINGLY, THE PAIR ARE JAPANESE CAR FANS WITH
A HOST OF QUALITY BUILDS TO THEIR NAMES! IF YOU'RE LOOKING FOR
CUSTOM FABRICATION, A ROLLAGE, BODYWORK OR MECHANICAL
UPGRADES FOR YOUR PRIDE AND JOY THEN YOU SHOULD GIVE THEM
A CALL. THEIR CONTACT DETAILS (AND PHOTOGRAPHS OF RECENT
WORK) CAN BE FOUND AT THE RELENTLESS PERFORMANCE WEBSITE:
WWW.RELENTLESSPERFORMANCE.CO.UK**

'I DECIDED TO INSTALL AN ENGINE THAT COULD COPE WITH MY LEAD FOOT'



performance Japanese motoring at the time, but he eventually bit the bullet and decided to seek out the Subaru that he'd always dreamed of. 'I ended up buying a green '95-plate UK Turbo. It was a great motor, but for reasons that escape me now, I saw fit to swap it for a knackered Land Rover. Unsurprisingly, I regretted my decision within hours of doing the deal, and I quickly began searching for a replacement Impreza!' he laughs.

The STi that Dale is in possession of today presented itself for sale during a search of online classifieds during the summer of 2008. The mildly-modified 1997 example featured a carbon-fibre bonnet, aftermarket five-spokes, a turbo timer and a boost gauge, yet its under-bonnet components remained untouched. Offering a blank canvas for its new owner to toy with, it was the perfect platform for a range of performance-enhancing updates.

Needless to say, the black beauty was soon sitting pretty at the Gents' Hertfordshire home. Coilovers, an enlarged stainless-steel exhaust system, a matching downpipe, a lightened flywheel and a Simtek ECU were immediately applied to the new arrival, resulting in a power figure in the region of 330bhp. Unfortunately, the honeymoon period was brought to an abrupt end by the first of many mechanical failures. 'I'd been driving the car for just two months when it decided to give up the ghost,' recalls Dale. 'I'm

not afraid to admit that the engine was trashed as a consequence of some seriously hard driving on my part! I treated the incident as an opportunity to equip the ol' girl with an engine that could cope with the demands of my lead foot. A fully forged two-litre lump and a pokey Roger Clark Motorsport turbocharger followed, and I was delighted when a subsequent mapping session delivered well over 400bhp,' he smiles.

Still performing as a road car, the STi ferried its proud pilot wherever and whenever he needed to be somewhere, but his initial excitement at being in charge of so many ponies soon made way for a longing to chase even more power. Indeed, reasoning that a 2.5-litre EJ25 engine mated to a larger turbo and a Driver Controlled Centre Differential (DCCD) six-speed gearbox would provide his already-superb Subaru with a greater degree of grunt, Dale ordered all of the parts required for the job. Even so, a word of warning was quick to follow. 'My Dad told me in no uncertain terms that he would ensure that my Impreza was turned into baked bean tins if I was ever to get caught speeding. He's a veteran racer himself, and he has always been keen to impress upon me the dangers of driving at excessive speed on the public highway. I promised to exercise the car's abilities at trackdays only, and that's when I looked into rules and regulations concerning the Nippon



ALL THE GEAR THE IMPREZA'S INTERIOR IS CHOCK-FULL OF RACECAR GADGETS SUCH AS THE ZEN PERFORMANCE DRY SUMP IN THE PASSENGER FOOTWELL, THE DOOR BAR-MOUNTED BRAKE BIAS VALVE AND A PLUMBED IN FIRE EXTINGUISHER



SPOILERED FOR CHOICE THE REAR SPOILER IS A HOME-MADE DESIGN THAT DALE'S DAD USED TO GREAT SUCCESS IN OVAL RACING. APPARENTLY IT WORKS GREAT ON THE IMPREZA, TOO, HELPING TO STICK THE REAR BTCC SLICKS TO THE TARMAC



Challenge series,' he confirms.

As already described, Dale's mate took this apparent interest in the competition as a green light to start dismantling the Impreza without warning! Fortunately, with Gent-the-Elder's words echoing around his bonce, our hero didn't put up much of a fight ('I guess we're turning it into a race car, then?!'). By this point, the winter of 2010 was in full swing, and the ensuing Christmas period was spent installing the aforementioned 2.5-litre lump, the new gearbox, a rollcage and other essential safety equipment in advance of the car's first official outing as a true track warrior.

Considering the fact that the car had never been used at a racing circuit – not to mention that it was set-up as more of a fast-road car than a serious championship title contender – all present at the first of 2011's Nippon Challenge qualifying heats were amazed when the new kid on the block hammered his car home to bag fourth on the grid. Better yet, Dale won the first race of the season, leading the pack from the second corner of the first lap at Castle Combe!

If the STi could be this competitive in a crude state of tune, then there was every possibility of battling for the series title if the car's aero package, mechanical components and chassis were treated to a track-friendly overhaul. It certainly provided Dale with food for thought but, before he could act, his continued success on the asphalt resulted in an invitation to compete at Snetterton in the Motorsport News Saloon Car Championship. The offer was duly accepted, although what was supposed to be an exciting day at the races ended in disaster when the petulant Impreza decided to cook its engine. Doh!

It was clear that the time had come to invest in serious equipment that would unleash the car's full potential, and Mark Aigin at celebrated Subaru parts specialist, Lateral Performance, was eventually called in to deliver the goods in the form of a fully forged 500bhp engine based around a 2.2-litre closed-deck EJ22G block. The engine's displacement has been increased to 2.35-litres, it's running a Garrett GT35 billet turbo, Version 8 STi cylinder heads, custom profile camshafts, a

'THE 500BHP ENGINE BASED ON 2.2-LITRE BLOCK'



TEAMWORK

UNLIKE MANY OF HIS ON-TRACK RIVALS, DALE'S DETERMINATION TO RACE HIS IMPREZA HAS BEEN ENTIRELY SELF-FINANCED. HEADING OUT EVERY WEEKEND DOESN'T COME CHEAP, THOUGH, AND HE CITES THE SUPPORT OF HIS TRUSTED FRIENDS, CHRIS AND NICK, AS THE KEY CONTRIBUTORS THAT KEEP HIM ON THE ASPHALT. 'I WOULDN'T BE ABLE TO COMPETE WITHOUT THESE GUYS. I CAN'T THANK THEM ENOUGH FOR THEIR CONTINUED SUPPORT,' HE BEAMS. THAT'S NOT TO SAY THAT HE WOULDN'T LIKE TO SECURE THE INVOLVEMENT OF OTHER PARTIES THROUGH CORPORATE SPONSORSHIP DEALS. 'I'D LIKE TO TAKE THIS OPPORTUNITY TO APPEAL TO POTENTIAL SPONSORS WHO MIGHT LIKE TO SUPPORT ME IN MY ONGOING EFFORTS TO SECURE CHAMPIONSHIP-WINNING TITLES!' HE SAYS. DROP HIM AN EMAIL AT LIGHT-IN23@AOL.COM IF YOU'D LIKE TO DISCUSS THE DETAILS!

bespoke intercooler, a Syvecs S6 ECU, Roger Clark Motorsport headers, a JC Weldfab three-inch custom exhaust system and a Zen Performance dry sump kit.

Meanwhile, James Middleton and Ashley Talbot at Cambridgeshire racecar preparation firm, Relentless Performance, were charged with the task of transforming the chassis and appearance of the largely standard-looking Subaru into the beast that you see on the pages before you. The car's shell was fully stitch-welded, a rear firewall and a tubed front end were fabricated to suit (the latter has ensured that the otherwise arduous job of engine and gearbox removal takes no longer than twenty minutes!), larger front and rear tubs were introduced to the proceedings, and a two-door ABW Motorsport wide-arch bodykit with a custom rear wing was expertly applied to the four-door shell before the application of a fresh lick of black paint.

Rota Grid rims wrapped in Dunlop BTCC rubber, EXE-TC competition coilovers and Whiteline suspension equipment have improved the car's handling abilities no end, while its stopping power has been upgraded with six-pot Alcon anchors at the front and four-pot APs at the rear with HEL brake lines throughout. Not that the car needed any assistance when it came to slowing down during a recent outing at Lydden Hill. 'I bought a second hand fuel cell that turned out to be full of swarf, foam and plastic!' cries Dale. 'A feed blockage caused by the floating contaminants starved the engine of petrol, causing the Lateral lump to run lean. I couldn't believe it – my brand new motor was ruined. Again!'

Mark restored the nuts and bolts to their former glory before a new alloy fuel tank was appointed in place of the faulty part. The car has been successfully competing in *Motorsport News* races ever since, and Dale has also been putting the refreshed engine through its paces in this year's Classic Touring Car Racing Club's Classic Thundersaloon series. He tells us that a sequential gearbox is in store for his mean and moody Impreza, and that he is planning to buy an R33 Nissan Skyline GT-R to serve him for road-going duties now that his slick Subaru is a dedicated circuit racer. Either way, we wish him every success for the rest of the racing season, and we can only hope that the one thing his awesome STi wants to destroy from this point onwards is the chance for its rivals to take the chequered flag! **JP**



BRAKING BAD
SIX PISTON
ALCON
CALIPERS GRIP
HUGE 355MM
DISCS AT THE
FRONT AND AP
RACING
CALIPERS
CLAMP ONTO A
SET OF 330MM
DISCS AT THE
REAR GIVING
THE IMPREZA
AWESOME
STOPPING
POWER!

TECHSPEC

ENGINE

Lateral Performance 'Banana' spec, EJ22G block, displacement increased to 2.35-litres, Wiseco custom ceramic coated pistons, Carrillo custom length stroker connecting rods, Arrow 79mm steel billet crankshaft, ACL race bearings, ported Version 8 STi 16-valve DOHC cylinder heads, race profile camshafts, Supertech billet valvetrain, uprated engine mounts, Garrett GT35 billet turbocharger, custom intercooler, custom boost pipework, Syvecs S6 ECU with custom map, Zen Performance dry sump kit, Mocal oil cooler, Roger Clark Motorsport exhaust headers, JC Weldfab 3-inch stainless steel exhaust system, alloy fuel cell, twin high-flow fuel pumps, Aeroquip fuel hoses, silicone joiners

TRANSMISSION

Six-speed DCCD manual gearbox and propshaft, Exedy triple-plate carbon clutch, factory differentials, factory shifter

SUSPENSION

EXE-TC competition coilovers, modified top mounts, Whiteline anti-roll bars and bump steer kit, polybushed throughout

BRAKES

Six-piston Alcon front calipers with 355mm discs, four-piston AP Racing rear calipers with 330mm discs, performance pads, HEL brake lines, adjustable brake bias pedal box

WHEELS & TYRES

9.5x18in Rota Grid Drift wheels painted black, British Touring Car Championship Dunlop slicks

EXTERIOR

Full respray in solid black, ABW Motorsport two-door wide-arch body kit, carbon-fibre bonnet, bespoke rear wing, tubed front end, bespoke front and rear tubs, Aerocatches, custom front splitter, safety switches

INTERIOR

All interior panels painted grey, bespoke rear firewall, SHP Engineering custom rollcage, Kirkey aluminium racing seat, six-point safety harness, custom dash binnacle, Stack gauges (oil temperature, oil pressure, water temperature, boost, rev counter), inline brake bias adjuster, dry sump system located in passenger foot well, Lifeline integrated fire extinguisher system

THANKS

Roger Clark Motorsport, Mark at Lateral Performance for the engine work, Ash and Jonboy at Relentless Performance for sorting the paint and bodywork, and to Nick and Chris for being my support team at every race meet (and for helping to patch up the car whenever it refuses to play ball!).





Join over 100,000 followers
www.facebook.com/whitelineflatout

**ANTI ROLL BARS
 CASTER KIT
 POSITIVE SHIFT KIT
 CAMBER KIT
 BRACING & MORE....**

**SUBARU BRZ
 TOYOTA 86
 NOW AVAILABLE**

WHITELINE
 Activate more grip.

www.whiteline.com.au | sales@redrangeruk.co.uk | Ph. +44 1383 723 850



JAP PERFORMANCE PARTS
 EXPRESS SHIPPING WORLDWIDE

LOCATED 10 MINUTES FROM GATWICK AIRPORT






RB25 IMPREZA DRIFT CAR

1975 BEAMS CELICA BY

CUSTOM BUILDS

BREAKING PARTS



HKS

WHITELINE Flat out

EXEDY RACING CLUTCH

CUSCO

TUNING PARTS

TUNING CENTRE

NEW





NEW AND USED PARTS SUPPLIED

FITTING AND SERVICING ON ALL MODELS

WWW.JAPPERFORMANCEPARTS.CO.UK
SALES@JAPPERFORMANCEPARTS.CO.UK
01293 520090

LATERAL

SUBARU PARTS FROM ROAD TO RACE

**GOOD LUCK TO DALE GENT
FOR THE 2015 RACE SEASON**



**CALL US TO SEE WHAT DEALS
WE CAN DO FOR YOU**

**LATERAL CUSTOM 2.35LT BUILT CLOSED DECK BLOCK
SHORT ENGINE PRICING FROM £4499+VAT**

**LATERAL PERFORMANCE
CUSTOM 2.1 & 2.35lt
STROKER KITS**



LATERAL PERFORMANCE MD321 CUSTOM BILLET TURBOS

The fastest spooling Subaru bolt on turbos. The choice of the UK's top Subaru tuners. Includes ceramic coated exhaust housing, fitting kit and 2 Year Warranty



WWW.LATERALPERFORMANCE.CO.UK TEL: (+44) 01923 238477



WORDS: GUY BAKER PICS: DAN SHERWOOD

THREE OF A KIND

WE REUNITE THE THREE PREVIOUS GENERATIONS OF HONDA'S CIVIC TYPE R IN CELEBRATION OF THE ALL-NEW FOURTH-GENERATION FK2 MODEL

Honda's storming new FK2 Honda Civic Type R may be grabbing all the headlines right now, but spending very nearly £30,000 on a brand-new Honda Civic isn't everyone's cup of tea – especially when tuned versions of the three previous Civic Type Rs can deliver just as many thrills for a small proportion of the price.

Honda's hi-revving VTEC powerplants have endowed the Civic Type R with a unique character ever since the first incarnation of the breed – the Japanese market EK9 – left the

factory gates in 1997. A practical persona, lashings of motorsport input and plenty of Type R badging have created a unique Honda sub-brand, which appeals above all to the Japanese performance purist.

Whether the latest FK2's move to turbocharged power damages that image remains to be seen but, however well engineered the latest Type R is, it'll have its work cut out to better its three illustrious predecessors.

That first EK9 Type R was, of course, only ever officially available to Japanese buyers, but the second-generation

Swindon-built EP3 Type R became one of the best-selling hot hatches of all time. Boasting a headline-grabbing 100bhp per litre the 2001 model quickly established itself as the benchmark hot hatch for a whole generation of Japanese performance enthusiasts, and in recent years has become one of the most popular rides to modify.

The recently replaced FN2 version didn't quite reach the popularity levels of the EP3, but still sold in large numbers. And with limited edition Mugen-tweaked versions keeping the Civic Type R brand on the boil,

the stage was set for Honda to launch this year's must-have hot hatch – their all-new, turbocharged, FK2 Civic Type R.

Perhaps surprisingly though, until this latest car's arrival it was actually the 1997 JDM-only EK9 that held the crown as Honda's fastest accelerating Civic Type R. Built around a blueprinted 1.6-litre VTEC engine, which produced a staggering 185bhp at 8200rpm, the 1070kg five-speed EK9 Type R could hit sixty in just 5.7 seconds. And with a screaming motorsport soundtrack and finely-balanced handling was available in just

CHRIS HARROLD'S FN2

ENGINE: STANDARD K20Z4 ENGINE, CPL COLD AIR INTAKE, HONDA J35 V6 THROTTLE BODY, ECU REMAP, HONDA RRC INLET MANIFOLD, HONDA FD2 CAMS, CPL EXHAUST MANIFOLD, JS RACING EXHAUST, HYBRID RACING TUCKED FUEL LINE, FUEL RAIL, FUEL PRESSURE GAUGE AND LOW PROFILE OIL CAP, MINT GREEN VALVE COVER, CARBON PLUG COVER
TRANSMISSION: JAP SPEED SHORT SHIFTER AND SKUNK2 GEAR KNOB
SUSPENSION: MEISTER R COILOVERS, SPOON RIGID SUBFRAME COLLAR SET, JS RACING INNER WING BRACES, EIBACH FRONT CAMBER BOLTS
BRAKES: SPOON MONOBLOCK CALIPERS, DO-LUCK BRAIDED BRAKE LINES, FERODO DS2500 PADS, STOP TECH FRONT AND OE REAR DISCS
WHEELS & TYRES: 8.5X18IN ET47 WORK EMOTION D9R ALLOYS WITH BRIDGESTONE POTENZA S001 TYRES, PROJECT MU WHEEL NUTS
EXTERIOR: FULL RESPRAY IN PORSCHE MINT GREEN, MUGEN REAR WING, HONDA 'GP' FRONT AND REAR BUMPERS, CARBON BONNET, VENTED WINGS AND SLAM PANEL, SPOON ANTI-GLARE WING MIRRORS, SMOKED WIND DEFLECTORS, RELOCATED FRONT NUMBER PLATE
INTERIOR: JS RACING FRONT STRUT BAR, FLOOR BRACE, 'C' PILLAR BRACE, PIONEER APP RADIO HEADUNIT, SPOON REAR VIEW MIRROR



CIVIC TYPE R BUYING TIPS

- **INSPECT THE BONNET, FRONT SPOILER AND WING MIRRORS FOR STONE CHIPS, ANY VARIATION BETWEEN PANEL COLOURS OR SIGNS OF ACCIDENT DAMAGE. WATCH OUT FOR HOLED RADIATORS, RUSTY WHEEL ARCHES AND BOOT HINGES AND CORRODED ALLOYS**
- **CABIN MATERIALS ARE ROBUST BUT OWNERS REPORT A VARIETY OF INTERIOR RATTLES AND SQUEAKS, AS WELL AS MISBEHAVING ALARMS, MALFUNCTIONING FUEL GAUGES AND WHISTLING WINDOW SEALS. ALSO CHECK OUT THE ROOF SEALS, CENTRE CONSOLE TRIM, DOOR LOCKS, AIR CONDITIONING, DOOR PANELS AND WINDOWS**
- **MOST TYPE R ENGINES STILL BEHAVE IMPECCABLY, BUT REGULAR SERVICING IS A VITAL PREREQUISITE FOR LONG ENGINE LIFE. LOOK OUT FOR ANY SIGNS OF OIL LEAKS, MISFIRES, ANY LACK OF POWER AND HEAT SHIELD RATTLES**
- **GEARBOXES ARE PRETTY RELIABLE BUT WATCH FOR UNTOWARD NOISES WHEN CHANGING DOWN, ESPECIALLY INTO THIRD GEAR. A KNOCKING SOUND THROUGH THE STEERING WHEEL AT FULL LOCK COULD MEAN A NEW STEERING RACK IS NEEDED**
- **THE RIDE IS FIRM – ESPECIALLY ON THE EP3 – BUT ANY SIGNS OF UNEVEN REAR TYRE WEAR, OR KNOCKING COULD INDICATE A PROBLEM WITH THE SUSPENSION: REAR ARM BUSHES ARE COMMON CULPRITS, AS ARE WORN DROP-LINKS**
- **BRAKING SYSTEMS HAVE FEW ISSUES, BUT MAKE SURE THE PADS AREN'T EXCESSIVELY WORN AND THAT THERE IS NO SQUEALING, GRINDING OR PULLING TO ONE SIDE CAUSED BY WARPED DISCS. UPGRADES ARE NEEDED FOR THE TRACK (EXCEPT ON THE CIVIC TYPE R MUGEN)**
- **FRONT TYRES OFTEN TAKE A BIT OF A HAMMERING AND CAN LAST LESS THAN 7000 MILES. BUDGET AROUND £120 A CORNER DEPENDING ON SIZE. LOOK OUT FOR BUBBLING PAINT ON OE ALLOY WHEELS**

four colours – white, metallic silver, black and yellow.

Exclusive Type R extras included Recaro bucket seats, tinted glass, sports bodykit, a front strut brace, front and rear spoilers, a titanium gear knob and even a front limited-slip diff. Designed very much with the trackday enthusiast in mind the EK9 was facelifted in September 1998, while a Type Rx model was also added in December 1999 with a few more luxuries – like a CD-player, keyless entry and aluminium pedals.

Japanese production ran until 2000, by which time Honda

had sold close to 16,000 examples. And although many are still on Japanese roads today, the EK9's relative rarity in the UK has led to rising values in recent years for the very best cars in mint condition.

Prices for decent examples start at just under £6000, but buyers should stick to cherished cars sporting immaculate Japanese or UK service records, and devoid of internal engine modifications. With a more nimble chassis than the later EP3 and FN2 models the back-to-basics EK9 makes an ideal trackday ride.

In contrast to the EK9, Honda's heavier UK-built 2001 EP3 was a more civilised machine, and boasted fresher styling than the EK9 – as well as a larger-capacity 200bhp 2.0-litre VTEC engine. With a new, slick, dash-mounted gear-shifter and a relatively low £15,995 price tag, it proved an instant hit. The standard spec included 17in dark-grey alloy wheels, front and rear spoilers, a mesh front grille, front and rear strut braces, ventilated disc brakes with ABS and EBD, electric windows and a Cat1 alarm. And in factory trim the 1204kg EP3 screamed past

62mph in 6.6 seconds. A limited-slip diff wasn't standard, though, and some felt the steering lacked feel compared to its predecessor – but the well-balanced EP3 still handled very effectively.

A 30th Anniversary £16,995 limited edition of 300 cars followed in 2004, with tinted rear windows, red Recaro seats, a Momo steering wheel and air conditioning, while the facelifted 2004 model – thanks to a lightened flywheel and ECU tweaks – also claimed improved throttle response and increased driveability. Honda released one



ANDY BOYLE'S EK9

ENGINE: JDM 98-SPEC B18C DC2 ENGINE, BAFFLED SUMP, AEM V2 INTAKE, SKUNK2 PRO SERIES INLET MANIFOLD, HONDATA INLET MANIFOLD GASKET, HOND-R ADJUSTABLE DECAT, FUJITSUBO RM01A EXHAUST, NGR CARBON PLUG COVER, MAGNECORE LEADS, SKUNK2 MAGNETIC DRAIN PLUG SET, BILLET INNOVATIVE ENGINE MOUNTS, SKUNK2 CAM PULLEYS, MISHIMOTO RADIATOR
TRANSMISSION: COMPETITION CLUTCH STAGE 2 CARBON KEVLAR CLUTCH WITH CHROMOLY LIGHTWEIGHT (5.5KG) FLYWHEEL
SUSPENSION: TEIN MONOFLEX COILOVERS, BUDDYCLUB FRONT CAMBER ARMS, SKUNK2 REAR LOWER CONTROL ARMS, ENERGY POLY BUSH KIT, MUGEN FRONT STRUT BRACE, MUGEN REAR STRUT BRACE, X BRACE
BRAKES: SPOON SPORTS TWIN PISTON CALIPERS, FERODO DS2500 FRONT PADS, STOPTECH SPORTSTOP FRONT DISCS, HEL BRAKE LINES
WHEELS & TYRES: 7X16IN RAYS ENGINEERING VOLK CE28N JJ BRONZE ALLOYS, 205/45/16 YOKOHAMA AD08 TYRES, MUTEKI WHEEL NUTS
EXTERIOR: MUGEN TYPE SS FRONT LIP, SEEKER V2 SPOILER, HR-V CLEAR SIDE REPEATERS, J'S RACING TOW HOOKS, SERGEANT JAPAN REAR DIFFUSER, MUGEN NUMBER PLATE BOLTS, BONNET DAMPERS
INTERIOR: BRIDE ZETA III SEATS, BUDDYCLUB SEAT RAILS, TAKATA MPH HARNESSES, SPOON SPORTS STEERING WHEEL, SPOON SPORTS BLUE WIDE REAR VIEW MIRROR, CARBON FUEL PUMP COVER, SKUNK2 GEAR KNOB, TEISHI CARBON AIRBAG DELETE

final £16,950 Premier Edition Type R in 2005 with tinted rear windows, red Recaro seats, a leather Momo steering wheel and red carpets and door inserts.

Between 2001 and 2005 the EP3 Type R was so popular that it made up 15% of all UK Civic sales – with 15,653 examples sold in total. With so many EP3s

than the EP3 – thanks to increased sound deadening, a more supple ride and less frenetic gear ratios. Power output for the FN2 was almost unchanged but the 201bhp European-spec FN2 hatchback was still very attractively priced – at just £17,600, or £18,600 for the better-equipped GT model. The Japanese market received

a rev limit warning and Alcantara sports seats; whilst the GT model added cruise control, automatic headlights and front foglights in the angular bumper.

October 2008 saw a minor face-lift with Honda also launching a Championship White Edition with a limited-slip diff and white wheels. But the pick of the FN2 models – the

buyers were offered a similarly-tuned Milano Red FD2 Mugen RR saloon.

All FN2s came with a limited-slip diff from late 2009 and Honda marked the end of production with a 2010 Type R Mugen 200 limited edition, boasting Championship White Mugen styling – but lacking any Mugen performance options. Honda sold approximately 13,000 FD2 Type Rs in Japan and 11,615 FN2 models in the UK.

'THE EK9 IS WITHOUT DOUBT THE PURIST TAKE ON THE TYPE R THEME'

sold there are still plenty of good examples around today, and plentiful supply has kept prices low – under £3000 buys a decent early Type R.

You'll need to spend at least £2500 more to get behind the wheel of an early 2007-on FN2 model however, with Honda's third-generation Civic Type R offering a more comfortable high-speed cruising capability

the FD2 saloon instead.

More civilised on the road than its EK9 and EP3 forebears, the FN2 still provides trackday thrills, but without any compromises on the road – the factory spec included 18in alloys, electric heated mirrors, aluminium footrests and drilled pedals, Type R sill plates, an alloy gearknob with red stitched leather, a big red starter button,

limited edition Civic Type R Mugen – arrived in 2009. Priced at an eye-watering £38,599 the car received the full Mugen Motorsports treatment. Just 16 UK cars were sold, but at least four more were made available in 2011 to be reworked by Mugen to 2.2-litres and 260bhp if buyers desired. It's unclear how many were actually converted. Meanwhile, Japanese

EK9 TUNING

The EK9 is without doubt the purist take on the Civic Type R VTEC theme, as Paul West at experts TDI-North stresses: 'The EK9 was outperforming similar hot hatches in its day, making significantly more power than any others with just a 1600cc engine, and revving to well over 8500rpm. The B16 engine, which featured the highly acclaimed Honda VTEC system, effectively gives two different cam profiles offering low-speed driveability and excellent fuel



economy plus a changeover to a much more aggressive fast-road cam profile that pulls hard to the limiter – encapsulating the VTEC ‘kick’ which Honda continued to champion in the later models.’

Andy Boyle’s pristine EK9 packs a recently rebuilt JDM 98-Spec B18C DC2 engine, which is now nicely loosened up – having covered around 10,000 miles. As a Honda enthusiast, working at Johnsons Honda in Oxford and possessing an FD2 as his daily driver, Andy knew exactly what he wanted when he bought his EK9 seven years ago, and a whole series of enhancements have improved his EK9’s performance without detracting from the popular OE JDM look. EK9s respond well to breathing modifications such as intakes, manifolds and exhausts – so under Andy’s EK9 bonnet you’ll find a baffled sump, an AEM V2 intake, a Skunk2 Pro Series inlet manifold, a Honddata inlet manifold gasket, a Hond-R adjustable decat with a Fujitsubo RM01A exhaust, NGR carbon plug covers, Magnecore 8.5mm HT leads, a Skunk2 magnetic





drain plug set, Billet Innovative engine mounts, a Skunk2 VTEC solenoid cover with cam pulleys and a Mishimoto X-Line aluminium radiator.

'Massive gains are only possible if you strap on a turbo or supercharger – expect to run around 250-280bhp with stock internals and a well matched kit,' Paul West tells us.

But most buyers – like Andy – will look to keep their EK9 NA, not only because it's so darn good in tuned factory trim, but also because stock EK9s are now rising in value. Just make sure you keep all those OE bits in your garage.

if you want a seriously quick EP3 then a Roots-type supercharger conversion is the best route.

'However, don't first rule out NA tuning,' says Paul at TDi North.

'The EP3 cars were de-tuned from the factory and even remapping a standard car will yield gains for around 40bhp midrange and 10bhp at peak giving better throttle response everywhere and improved mpg. Further gains can be had from fitting a decent quality intake, manifolds and exhaust systems then remapping to suit these modifications.

'With simple bolt on parts we regularly see the cars making

fully stripped out, Time Attack-inspired EP3. Purchased two-years ago, Matt's third EP3 – this 2002 Type R – boasts 295bhp courtesy of a Jackson Racing supercharger at 8psi. Supporting powerplant modifications include a CPL support brace, a Jackson Racing exhaust manifold with a Toda exhaust, a Gruppe M intake, a K-Pro mapped ECU, a TGM baffled sump, a Koyo aluminium race radiator, Energy Suspension engine mount inserts, a Powerflex gearbox mount insert, an FN2 cam cover, CPL fuel rails, RC 650cc injectors, a GReddy oil catch tank, a Tegiwa battery tie bar,

'A SIMPLE REMAP CAN SEE GAINS OF AROUND 40BHP ON EP3 MODELS'

EP3 TUNING

The EP3's engine featured variable-intake cam control making it more tuneable than the EK9's B-Series engine, and JDM cars boast a slightly more powerful engine with higher compression pistons, different camshafts and revised intake and exhaust manifolds – as well as different gearbox ratios and a factory-fitted limited-slip diff. But

about 240bhp, and with a set of decent quality camshafts about 260bhp can be possible.' With further engine work such as a stroker crank, pistons, rods and head porting 300bhp is possible, but the costs soon mount up – so a turbo or supercharger kit from Jackson Racing, Rotrex or CPL (at just over £3000) is your best route to 300bhp.' And that's what enthusiast Matt Sharp was after when he bought this red,

Skunk 2 reservoir socks and fender washers and a Mocal Setrab 25-row oil cooler with a thermostatic plate. Clearly a substantial amount has been spent, and Matt has received a lot of help and support along the way from Bren, Stevie and Lee at Grinspeed, friends Raf, Perry and Nick and fiancé Naomi, but the end result is one seriously cool-looking ride.

FN2 TUNING

'The FN2, just like its predecessor, was subject to considerable development – and sharing similar engine components from the earlier K20A made them immediately accessible to aftermarket tuning,' emphasises Paul West. But tuning hasn't been restricted to big-power forced induction conversions: 'A freer-breathing, normally-aspirated, remapped FN2 is still quite capable of delivering an extra 40bhp,'

emphasises Guy Chamberlain at Type R experts CPL Racing.

Both approaches to FN2 Type R tuning are growing in popularity and, as Paul at TDi makes clear: 'Like its predecessor, the FN2 shares a very similar engine to the K20A/2 used in the EP3, effectively making them similarly tuneable when modified and remapped.' But it's not all plain sailing. 'They don't respond quite as well without one or two tweaks though, as Honda introduced an oil pump system with balancer shafts which, although making the motor smoother, also introduced some power losses,' Paul tells us. No surprise then that many FN2 owners choose to replace their car's OE oil pump with an EP3-spec version. Like the earlier EP3 Type R, forced induction is a popular tuning route on the FN2, with a range of supercharger and turbo

CIVIC TYPE R MILESTONES

- 1997** FIRST EK9 JDM-ONLY CIVIC TYPE R LAUNCHED
- 2001** SECOND-GENERATION UK-BUILT EP3 HONDA CIVIC TYPE R LAUNCHED WITH 2.0-LITRE 197BHP ENGINE
- 2002** 30TH ANNIVERSARY LIMITED EDITION LAUNCHED WITH EXTRA EQUIPMENT AND PRICED AT £16,995
- 2004** REVISED MODEL PRODUCED WITH TWEAKS TO ENGINE, BODYWORK AND INTERIOR
- 2005** FINAL EDITION TYPE R LAUNCHED WITH EXTRA EQUIPMENT AND PRICED AT £16,950
- 2007** THIRD-GENERATION CIVIC TYPE R LAUNCHED, BOASTING FD2 JAPANESE SALOON AND FN2 EUROPEAN HATCHBACK FORMS
- 2008** CHAMPIONSHIP WHITE EDITION LAUNCHED WITH LIMITED-SLIP DIFF AND WHITE WHEELS
- 2009** LIMITED EDITION £38,599 240BHP CIVIC TYPE R MUGEN LAUNCHED IN UK. STANDARD CAR GETS LIMITED-SLIP DIFF
- 2010** PRODUCTION OF FN2 TYPE R ENDED IN OCTOBER 2010 WITH CIVIC TYPE R MUGEN 200 LIMITED EDITION
- 2015** FOURTH GENERATION TURBOCHARGED FK2 MODEL HONDA CIVIC TYPE R LAUNCHED



MATT SHARP'S EP3

ENGINE: K20A WITH JACKSON RACING SUPERCHARGER AND EXHAUST MANIFOLD, TODA EXHAUST, GRUPPE M INTAKE, K-PRO ECU, TGM BAFFLED SUMP, SFS INTAKE HOSE, KOYO RACE RADIATOR, SAMCO HOSES, ENERGY SUSPENSION ENGINE MOUNT INSERTS, POWERFLEX GEARBOX MOUNT INSERT, FN2 CAM COVER, AEM BILLET PLUG COVER, CPL FUEL RAIL, RC 650CC INJECTORS, GREDDY OIL CATCH TANK, TEGIWA BATTERY TIE BAR, MOCAL SETRAB OIL COOLER WITH THERMOSTATIC PLATE
TRANSMISSION: WAVETRACK LIMITED-SLIP DIFF, LIGHTWEIGHT FLYWHEEL, BUDDYCLUB SHORTSHIFT ASSEMBLY
SUSPENSION: BUDDYCLUB COILOVERS AND ROLL CENTRE ADJUSTERS, SUPERPRO CASTOR AND ROLL-BAR BUSHES, CUSCO REAR ARB WITH POLYBUSH MOUNTS, POLYBUSHED REAR HUBS, EIBACH ADJUSTABLE CAMBER ARMS, SKUNK 2 LCAS, DC SPORTS TIE BAR BRACE
BRAKES: STOPTECH 4-POT BILLET CALIPERS WITH 328MM DISCS AND PAGID PADS, STOPTECH BRAIDED HOSES (FRONT), STOPTECH SLOTTED DISCS WITH FERODO DS2500 PADS AND HEL BRAIDED HOSES (REAR)
WHEELS & TYRES: 8X17IN ADVAN RACING RZ ALLOYS WITH 225/45/17 DUNLOP DIREZZA DZO3G SEMI-SLICK TYRES, RED MUTEKI WHEEL NUTS
EXTERIOR: J'S RACING VENTED FRONT WINGS, MUGEN-STYLE REAR SPOILER, MUGEN-STYLE SPLITTER, WIND DEFLECTORS, VENTED BONNET
INTERIOR: STRIPPED OUT WITH SAFETY DEVICES ROLL-CAGE, CORBEAU REVOLUTION SEATS, BUDDYCLUB SEAT RAILS, TRS HARNESSSES, FLOCKED A-POST TRIMS, OMP STEERING WHEEL WITH QUICK RELEASE BOSS

solutions available. And the FN2 chassis can handle the power very well – with its slightly wider track and longer wheelbase.

Chris Harrold's striking Porsche mint-green FN2 is currently normally aspirated, but claims a throttle body from a Honda J35 V6 engine and an expert remap by Guy at CPL Racing. Supporting modifications include a Honda RRC inlet manifold, Honda FD2 cams, a CPL cold air intake and exhaust manifold, a J's Racing exhaust, a Hybrid Racing tucked fuel line, fuel pressure gauge and low-profile oil cap, and Chris has added a matching mint-green valve cover and a carbon spark-plug cover. At the moment though he can't take his car on UK tracks – that exhaust is just too loud – but he's looking into alternatives. And we reckon some form of forced induction can't be too far away, either. **JP**

CIVIC TYPE R CONTACTS

CIVICTYPE-R.CO.UK
TYPE-R-OWNERS.CO.UK

CIVIC TYPE R TUNERS
TDI-NORTH
TDI-NORTH.COM

CPL RACING
CPLRACING.CO.UK

EUROSPEC
EURO-SPEC2000.CO.UK

TGM SPORT
TGMSPORT.CO.UK

ABP MOTORSPORT
ABPMOTORSPORT.CO.UK

TEGIWA IMPORTS
TEGIWAIMPORTS.COM

HOND-R
HONDAPERFORMANCEPARTS.CO.UK

TTS PERFORMANCE
TTS-PERFORMANCE.CO.UK

GRINSPEED
GRINSPEED.CO.UK

FUNKY POWER
FUNKYPOWER.CO.UK

JAP PERFORMANCE PARTS
JAPPERFORMANCEPARTS.CO.UK



HONDA CIVIC TYPE R MUGEN

MUGEN MOTORSPORTS WAS FORMED IN 1973 BY HIROTOH HONDA, THE SON OF HONDA MOTOR COMPANY FOUNDER SOICHIRO HONDA, AND MASAO KIMURA. TUNING AND RACING HONDAS IN THE SUPER GT CHAMPIONSHIP, MUGEN ALSO SELLS AFTERMARKET PARTS AND TUNES RACING VEHICLES FOR OTHERS – INCLUDING TYRELL, LOTUS AND JORDAN. THE 2009 FN2 CIVIC TYPE R MUGEN WAS ONE OF THEIR GREATEST CREATIONS – AND THE FIRST MUGEN-BUILT ENGINE AVAILABLE FOR USE ON THE ROAD OUTSIDE JAPAN. ONLY 20 OF THESE BESPOKE 240BHP CARS WERE MADE – EACH ONE PRECISION ENGINEERED IN THE UK BY MUGEN EURO AND BUILT WITH PARTS AND ENGINEERING ONLY MADE AVAILABLE FOR THESE CARS. INITIALLY JUST 16 EXAMPLES WERE SOLD, PRICED AT £38,599, BUT THE OTHER FOUR WERE SUBSEQUENTLY MADE AVAILABLE IN 2011 REWORKED BY MUGEN TO 2.2-LITRES AND 260BHP. THE VTEC PUNCH KICKING IN AT A LOFTY 5,500RPM, WITH POWER PEAKING AT 8300RPM, AND THE MUGEN BOASTED A SUB-SIX-SECOND 0-62MPH TIME. UPRATED PISTONS, CAMSHAFTS AND A MUGEN ECU WERE ADDED, ALONG WITH A QUICK-SHIFT TRANSMISSION, AN UPRATED SUSPENSION, BODY STYLING AND MUGEN 18IN GP FORGED ALLOYS. A BESPOKE EXHAUST WAS ALSO FITTED, ALONG WITH 4-PISTON MONO-BLOCK RACING CALIPERS WITH 310MM FRONT DISCS AND MUGEN PADS. TRACKDAY BUYERS WERE ALSO OFFERED THE OPTION OF THREE OIL AND WATER METERS, VARIOUS COMPETITION CLUTCHES AND A TWO-SEAT TRACK KIT INCLUDING TWIN RECARO SEATS, 4-POINT TAKATA HARNESSSES, A REAR CLOSING PANEL AND YOKOHAMA A048 TYRES

TTS PERFORMANCE

FULL WORKSHOP FACILITIES INCLUDING
ENGINE BUILDING, CNC MACHINING, REBORING
ENGINE SLEEVEING, INHOUSE FABRICATION
AND ROLLING ROAD DYNO

DYNO POWER RUNS AVAILABLE FROM £35!



SUZUKI SWIFT SPORT

ROTREX™
SUPERCHARGERS

CHECK OUR WEBSITE FOR FULL DETAILS

AND PRICING ON AVAILABLE KITS AND PRODUCTS

TTS-PERFORMANCE.CO.UK



WE'RE ON FACEBOOK

TTS PERFORMANCE



NEW FN2 CIVIC TYPE-R 500+BHP KITS

HONDA CIVIC TYPE-R

Tel: 01327 858212
email: sales@tts-performance.co.uk

HONDA S2000



EPR

EPR RACING

FOR ALL YOUR TUNING NEEDS.



AERO BODY KITS



CARBON ACCESSORIES



PERFORMANCE WHEELS



COILOVER SUSPENSION

EPR Products:

PLUS MANY MORE.....



New Arrival Aero Kits:

Official Dealers of: **AeroCatch**



GT86 Rocket Bunny Wide Kit



Evo X VA - Style Wide Kit



BRZ ZE-Style Wide Kit

Goki

CARBON ACCESSORIES

JAP SPEED

D1 Spec
MOTOR RACING SPORTS



BLITZ



Official Sponsor of British Drift Championship

Tel: +44 (0) 1509 20888

Email: Sales@EPRacing.co.uk

Web: EPRacing.co.uk

ROAD TO REDLINE



HONDA FANS FROM ALL OVER EUROPE GATHERED AT THE WORLD-FAMOUS NÜRBURGRING RACING CIRCUIT IN GERMANY TO CELEBRATE THE ARRIVAL OF THE NEW CIVIC TYPE R...

WORDS: DAN FURR PICS: THORSTEN WEIGL & DAN FURR

Unless you've been hiding under a rock for the past few months, you'll know that Honda has launched what might prove to be the most important Type R in its history. Indeed, we reported in the May issue of *Japanese Performance* that the sensational new Civic managed to smash the previously held front-wheel drive lap record at the Nürburgring in a staggering 7m 50.63s (that's almost four seconds faster than the lap time it obliterated!). Meanwhile, the World Touring Car Championship FK2 has been turning out some impressive performances at the hands of star drivers Gabriele Tarquini, Tiago Monteiro and Norbert Michelisz.

When the FIA announced its intention to stage the first ever round of the WTCC at the 'Green Hell', it was as if the planets had aligned! After all, sports car fans were still reeling from the news that Honda had torn up the Tarmac at the legendary racing circuit with its 306bhp, turbocharged Type R, and now the Castrol Honda team was about to descend upon the very same track with all guns blazing. If there was ever cause for celebration, then this was surely it!

'We saw the event as an important homecoming for Honda, primarily due to the amount of time we spent developing the new Type R at the Nürburgring,' explains the manufacturer's motorsport PR manager, Aleks Krajcer. His are sentiments echoed by Honda Europe marketing bod, Klaus-Peter Kniedel. 'The passion and excitement that the new car has generated among loyal Honda fans has been overwhelming. With that in mind, Aleks and I wanted to bring together Civic Type R enthusiasts from all over the EU in order to mark the arrival of the next chapter in our brand's colourful history. Throwing a launch party at the 'Ring for three hundred likeminded enthusiasts while the WTCC boys strutted their stuff on the asphalt seemed like the perfect way to announce the new era of Type R!' he smiles.

Out with the old and in with the new, then? Well, not quite. Civic Type R fans are a dedicated bunch, and interest in legacy models such as the EP3 and FN2 is as high as it has ever been. A world of tuning options coupled with bargain-busting purchase prices on the used car market have made these special

editions an attractive proposition for petrolheads looking for normally aspirated fast-road fun, and it came as no surprise to see a vast number of tweaked and tuned examples of Honda's hot hatch belting their way across Europe during what was trending on Twitter as the #RoadToRedline.

We borrowed Honda UK's own FN2 Type R GT when planning our jaunt to Germany.

Chuckling out over 200bhp, the Milano Red road rocket made light work of the trip, and the model's striking dial and dashboard setup still feels fresh almost a decade after it was first unveiled. In fact, the new Civic Type R inherits much of its cockpit control configuration from its predecessor, proving that Honda's design department was bang on the money when it delivered what



THE FN2 MODEL CIVIC TYPE R IS THE MODEL THAT WILL BE MAKING WAY FOR THE NEW TURBOCHARGED FK2 VARIANT IN THE COMING MONTHS. EVEN WITHOUT A BLOWER, THOUGH, THE OUTGOING FN2 IS A BLINDER!



HONDA'S WTCC STARS WERE ON HAND TO ANSWER QUESTIONS FROM THE HONDA FANS

was once considered to be a radical approach to cabin design.

With VTEC kick propelling us across the continent, we soon arrived at the Type R race camp, located just a few hundred yards from the Nürburgring entrance. Attendees from over thirteen countries quickly started to fill the site, bringing an awesome array of Japanese machinery with them; EP3s, FN2s, S2000s, Integras and even the occasional NSX had travelled from countries including the UK, Poland, France, Romania and the Netherlands, although the award for greatest distance travelled has to go to YouTube star, Jason Richmond. Known by his fans as 'HondaPro Jason', the social media star took a break from filming his weekly Honda news show and flew in from his home town in Illinois, USA!

VIP 'access all areas' passes for a weekend of top quality motorsport were provided to each and every guest (along with goodie bags, Type R



WITH SUPER-WIDE ARCHES AND A HUGE REAR WING, THE WORLD TOURING CAR CHAMPIONSHIP FK2'S LOOK SERIOUSLY MEAN AND HAVE LENT MUCH OF THEIR DESIGN AND TECHNOLOGY TO THE NEW ROAD CAR





IT WASN'T JUST THE RACERS THAT WERE ALLOWED OUT ONTO THE LEGENDARY TRACK, AS A RANDOM LOTTERY OF THE TYPE R DRIVERS AT RACE CAMP PRODUCED A LIST OF THOSE THAT WERE PERMITTED TO DRIVE A SPECIAL CELEBRATORY LAP OF THE 'RING IN BETWEEN ROUNDS OF TOURING CAR RACING

apparel and the promise of a seemingly unlimited amount of food and drink for the duration of our stay), with the promise of exciting WTCC action and ADAC 24hr endurance racing to be enjoyed accordingly. Lucky punters were buzzing with excitement, and the camp felt like a mini festival, with friendships being forged thanks to unbridled jubilation and a common interest in hot Hondas.

Of course, all eyes were soon focused on the brand new Civic Type R that was parked alongside its WTCC sibling in the racing venue's lower paddock. Honda fans old and new found it difficult to tear themselves away from the car that had brought them together, with more than a few registering their interest in placing an order for the new arrival! It's easy to see why: striking looks, cutting

edge technology and class-beating power have provided Honda with a true halo car. 'It's an entirely new proposition for Type R fans,' reasoned Civic Type R Owners Club head honcho and FN2 owner, Stuart Pridham. 'I'm certainly considering buying one in the not-too-distant future!' he added with a smile.

Meanwhile, as the Castrol Honda WTCC team were readying themselves for racing, Gabriele Tarquini took time out to talk to us about the new car. 'It's fantastic, and I feel very lucky to be able to contest the WTCC title from behind the wheel of the new Civic. I've driven the production Type R extensively, and its chassis is unbelievably responsive when pushed hard. Prospective buyers will be bowled over by the abilities of the model, and

I have no doubt that it will leave a smile on their faces after even the shortest of test drives!' he grinned.

With his glowing endorsement nailed, Gabriele was ushered off to the track, but he wasn't the only Honda fan at the Nürburgring that was afforded the opportunity to test his driving skills at what is one of the world's most challenging circuits; a random lottery of the Type R drivers at race camp produced a list of those that were permitted to drive a special celebratory lap of the 'Ring in between rounds of touring car racing.

Among those fortunate enough to be able to put the pedal to the metal was EP3 owner, Claire Davies. The girl from Ashford has owned her beloved 'Herbert' for the past half-decade, and she was

thrilled to be able to take him around the track following the recent purchase and installation of a Group N induction kit, J's Performance silicone hoses, a cat-back stainless steel exhaust system, a Quaife limited-slip differential and suspension upgrades that include camber arms and bolts, an uprated anti-roll bar and J's Racing uprated strut braces.

Chantal Dettori was equally as excited to put her superb S2000 through its paces. Shod in Volk rims and equipped with a J's Racing carbon-fibre intake, the classic roadster sat pretty on its KW dampers. 'I've added a titanium exhaust system in an effort to free up a few trapped ponies,' she told us. 'I'll be interested to see how the car fares around the track, particularly as I've just managed to rack up the car's



THE FANS WERE JUBILANT WHEN TOLD THE BEERS WERE ON HONDA'S TAB!



TENSION WAS HIGH BEFORE THE START OF THE RACE WHEN THE GRID GIRLS STORMED THE TRACK

300,000th kilometre!' (186,500 miles) she laughed.

Elsewhere, radically modified motors were represented by Jorg Jensen and his bright green EP3. Complete with gull-wing doors, nitrous injection and a comprehensive ICE install, it was impossible to miss him as he made his way onto the track through the entrance at paddock three. He was joined by Brit, David Taylor, who owns a modified EP3 in the form of a supercharged black beauty that


recently produced 291bhp during a rolling road session. The car features Meister-R coilovers, Brembo four-pots and a Tegiwa exhaust, and David could barely contain his excitement at being allowed to parade his pride and joy along the hallowed ground of the thirteen-mile race track. 'It's a dream come true,' he beamed.

The chosen few completed their lap without incident, and it was great to see WTCC fans applauding the road-going Hondas as the drivers tackled

some of the more difficult corners that top-drawer motorsport has to offer.

Later, as the sun began to set, the eagerly anticipated 24hr endurance event kicked off, heralding the start of a long night of partying against a backdrop of stunning night racing, live bands and beer-fuelled cheer!

All that was left for us to do was to head back to Blighty in our trusty FN2 Type R GT the following day. The rolling hills and ribbon-like Tarmac strewn

across northern Germany provided the perfect setting for a frantic VTEC-charged drive home while we reflected on the amazing weekend and awe-inspiring racing that had been laid on by our friends at Honda. 'It's definitely something that we'd like to do again soon,' admitted Aleks. Count us in! 

THANKS

Aleks and Klaus, Rob Beddington, Thom Shardlow, Monique Clarke, Sharon Horsley and Simon Branney



A BEWINGED NSX AND LAMBO-DOORED CIVIC WERE AMONG THOSE THAT ATTENDED THE BASH





RACING SPORTS

BIG BRAKE HORSEPOWER

NEW SYSTEM DESIGN FOR 2013



Rotor and Bell Assembly

Balanced rotors to ensure optimum performance, the kits come pre-assembled and ready to fit. The bell is manufactured from lightweight aluminium. Keeps unsprung weight to a minimum and reduces servicing costs.

FROM 286MM 4 POT TO 421MM 8 POT SYSTEMS

304mm 330mm 356mm 380mm

£999

4 POT

£1049

6 POT

£1149

6 POT

£1849

8 POT

PRICES STATED INCLUDE VAT. E&OE 2013



Lightweight & Rigid

The D2 Racing calipers are CNC machined from aluminium, with S45C steel CNC mounting brackets for strength and accuracy of fit on your vehicle.

Durable Finish

Any colour you like, so long as it's a deep red, black, purple or yellow.

Other colour options are available with a surcharge



External Dust Seals

Prevents sticking or dragging brake issues, ensures the optimum in performance when you need it most. Improved design for 2013.

Plug and play at d2brakekits.co.uk

The D2 Racing brake kit includes everything you will need, except brake fluid.

- › Pair of lightweight strong aluminium calipers
- › Pair of race specification rotors
- › Pair of lightweight aluminium bells
- › Pair of CNC machined steel brackets
- › Pair of braided brake lines
- › Set of UK high performance brake pads
- › Selection of brake pad upgrades also available
- › Complete fitting kit and fitting guide

0% FINANCE AVAILABLE

subject to status. conditions apply

RETURN OF THE KING

THE CIVIC TYPE R HAS LONG BEEN THE RULER OF THE JAPANESE HOT HATCH SCENE, BUT WITH HONDA'S LATEST OFFERING PACKING VTEC **AND** FORCED INDUCTION, IT PROMISES TO BE BETTER THAN EVER. THE KING IS DEAD...LONG LIVE THE KING!

WORDS: DAN SHERWOOD PICS: HONDA

The loop of undulating Tarmac that encircles the Eifel mountains in northern Germany has a lot to answer for. Ever since manufacturers realised the marketing benefits of building a car that can lap the legendary Nordschleife circuit faster than its nearest competitors, they have been falling over themselves to be at the top of the 'Ring's hot lap table. The hot hatch segment of the market was a particularly brutal battle, with several manufacturers pitting their mightiest front-wheel drive offerings at the track in order to be able to call themselves top dog. The record seemed to swap hands on an almost weekly basis as the various hot models got increasingly more hardcore and, ironically, as their lap times shortened, their monikers got ever more lengthy and obscure.

The one name that seemed conspicuous by its absence in the race for 'Ring dominance was Honda, who had yet to throw its hat into the ring as, at the time of the fiercest battles, its current offering was well outgunned by the opposition. Honda purists may well have revered the brand's staunch loyalty to building performance cars with high revving, naturally aspirated engines and the purity of the driving experience that it offered, but they'd be dreaming if they thought that any of the previous Honda performance models could hold a candle to the new breed of turbocharged terrors that were carving up the Karussell on a weekly basis. And

Honda must have known it, too, because when it was revealed that they would be bringing a new version of the Civic Type R to the party, before the car was even designed, Honda's president announced that it would be the fastest front-wheel drive car around the circuit. And this didn't come with some caveat of achieving the feat in a few generations' time or with the release of a stripped-out and 'caged limited edition model, but on their first attempt – now that's some pretty big boots to fill.

With such stratospheric standards to achieve, there was much speculation about what would be powering the new model – a big 3.0-litre V6 or a screaming stroked 2.2 were options that some bandied around – especially with Honda's tradition of sticking with NA powerplants, but ultimately, in order to keep up with the current crop of uber hatches doing the rounds, and if they had any hope of reaching the strict emissions and fuel economy targets that new cars must meet, there was only one likely outcome – forced induction. And so this latest Type R becomes the first ever factory car to carry both a red H and a turbocharger. Oh, and it also comes with something else too...a Nürburgring lap record. A 7min 50.63 lap to be precise, which not only puts it on the top of the pile of its contemporaries – by some margin we might add – but also ahead of genuine supercars such as the Lamborghini Gallardo LP 560-4, the 997 Porsche 911 Turbo and

Nissan's mighty GT-R. When it comes to Honda, what the president wants...the president obviously gets!

So when we got the call inviting us to see the new car in the metal and take to the track at the Slovakiaring and the roads in and around Austria, we had our bags packed faster than you could say 'VTEC kicked in yo!' – or should that now be 'turbo kicked in, yo!'. Either way, we were chomping at the bit.

On the flight over, we're excited to see exactly what a factory turbo'd Type R will be like, after all, we in the tuning scene have seen and experienced countless turbo'd and supercharged Civics over the years, some with power outputs that could put even Bugatti Veyrons in the shade. So while the idea of a 306bhp Civic Type R with 295lb ft of torque and capable of 0-62mph in 5.7 seconds and a top speed of 167mph sounds exciting to the masses, what is really exciting to us is the prospect of the greater abundance of aftermarket tuning possibilities that come with the addition of forced induction. Unlike Hondas of old, which rely on expensive and complex naturally aspirated tuning and head work for relatively small gains, or adding similarly-expensive aftermarket turbo or supercharger kits to improve performance, this new model will likely respond extremely well to a simple and relatively inexpensive remap and a handful of bolt-on breathing mods – once someone cracks

I'VE BOUGHT ONE!

BEN VINER, HEL PERFORMANCE

'THE NEW TYPE R IS ONE OF THE MOST HOTLY ANTICIPATED HONDAS FOR A LONG TIME. PEOPLE HAVE SEEN AND HEARD OF THE RESULTS AT THE NÜRBURGRING AND ALL THE HYPE IT'S CREATED. ENTHUSIASTS HAVE BEEN RETRO-FITTING TURBOS TO HONDAS FOR YEARS NOW AND TO FINALLY HAVE ONE FROM THE FACTORY IS AWESOME! WE BOUGHT AND BUILT AN S2000 IN 2012, WHICH WE RAN IN TIME ATTACK IN 2013. UNFORTUNATELY IT WAS CURSED AND HAD TWO FIRES IN THE SEASON AND WE RETIRED IT FOR 2014 WHEN WE HEARD OF THE ARRIVAL OF THE NEW CIVIC TYPE R. THE TUNING POTENTIAL OF BOTH THE S2000 AND THE NEW TYPE R IS MASSIVE. FOR THIS REASON, BOTH ON A PERSONAL AND COMMERCIAL FRONT WE DECIDED THE NEW TYPE R WAS THE CAR FOR US TO LOOK AT NEXT, SO WE PUT OUR NAME DOWN FOR ONE STRAIGHT AWAY! IT'S FRESH AND HAS HAD PLENTY OF TESTING, WHICH SUGGESTS IT'S A REAL TOOL. FOR US, WORKING WITH A BLANK CANVAS AND WORKING WITH ALL OF OUR PARTNERS TO DEVELOP NEW PRODUCTS MAKES IT AN EVEN MORE EXCITING PROJECT, INSTEAD OF SIMPLY PUTTING PRODUCTS ON A CAR WHICH HAS ALREADY HAD DEVELOPMENT/TUNING PRODUCTS MADE FOR IT. WE'VE ENLISTED SOME OF THE VERY BEST AFTERMARKET PRODUCT MANUFACTURERS IN THE MARKET TO WORK WITH US TO DEVELOP NEW PRODUCTS FOR THIS TYPE R, WHICH WILL NOT ONLY BENEFIT US, BUT ALSO THE OTHER LUCKY TYPE R OWNERS OUT THERE LOOKING TO UPGRADE THE STANDARD CAR. WE CAN'T WAIT!'



the software to allow the car's ECU to be reflashed, that is. After all, Honda is renowned for building engines that can not only take an endless stream of abuse, but also a hefty amount of tuning, too, which then makes the asking price of just a fiver under £30k a little less hard to swallow. Almost!

Once landed we make our way to the Slovakiaring – a challenging 3.68 mile track with both high and low speed corners, blind crests and a couple of long straights to really stretch the Type R's legs. It won't be the first time a Type R has blatted around its sun-baked Tarmac, however, as the Castrol Honda World Touring Car Championship team also run Civic Type Rs with Gabriele Tarquini and Tiago Monteiro in

the driver's seats, and the track is part of the Championship calendar, so we'll be following in the tyre tracks of some really hot Hondas that's for sure.

When we first see the car, in the bright sunlight of the track's pitlane, it looks striking. Much more hardcore than its FN2 predecessor, its snarling face and bloated haunches festooned with grilles, vents, splitters, spoilers and diffusers. We're told that the styling and bodywork is not just for show either, as each piece of aero addenda is actually functional, either improving cooling, reducing drag or contributing – in conjunction with an almost completely flat floor – to produce *actual* downforce – a very rare thing on production cars, especially hatches, which

usually generate lift at speed. It's the type of car that would be quite hard to improve from an aesthetic or aero standpoint, although we're sure that it won't be that long before some crazy Honda fan slaps a full-on WTCC or BTCC-style wide-arch kit on one for the ultimate in 'get out my way' styling!

The huge vented arches are filled with 19in wheels with specially developed Continental SportContact 6 tyres, which is the same rim and rubber combination that ripped up the 'Ring record months earlier, but is still an all weather tyre, not some uber grippy semi-slick trackday tyre. Who knows how much faster it could've gone with some more serious rolling stock and badass rubber?

Up front, behind the 19s, is a

set of 350mm Brembo discs and four pot calipers, which are the largest brakes ever to be installed on a production Type R model and look more than up for the job. But with the track beckoning, we'll soon find out.

Opening the driver's door the interior is typically Type R in its layout and aesthetic. The driver is obviously the centre of attention with the now familiar multi-layered dash encircling the thick red and black leather steering wheel, the red 'H' prominently displayed in its centre. The seat's hip point sits 20mm lower than a standard Civic and improves the driving position while the heavy side bolsters give excellent lateral support. They look pretty damn cool, too, which is a bonus, with harness slots for those that want



to add them for a true track experience. The other trademark Type R trait that the new car shares with its forebears is having the gearshifter in the perfect place for rapid driving. Honda has stuck with a short shifting six-speed manual transmission for the new Type R, even when many of its rivals are going down the twin-clutch DSG route. This is down to Honda's belief that much of the driving enjoyment derived from a sports car is from the engagement and interaction between man and machine, part of which is delivered by having to shift the cogs manually. It's a trait we hope continues, as although DSG boxes are an excellent solution for fast, effective shifts, you can't beat the thrill of a manual 'box for nailing a lightning upshift or perfectly timing a rev-matched downshift as you brake into a tight corner!

Firing up the Type R's turbocharged K20C engine by pushing the dash-mounted red button is greeted with a low thrum from the twin exit, twin-pipe exhausts. Unlike previous naturally aspirated models, the

redline is at a relatively low 7000rpm – which is actually quite high for a turbo engine and is achievable due to the lightweight internal components – and whether it will still deliver the same high-revving howl on the limit of Type Rs of old is unlikely, but the turbo shove should hopefully make up for it. Let's find out!

Pulling out onto the track and nailing the throttle, it's obvious that the Type R packs vastly more power than any that have gone before, pulling hard and cleanly from low revs right up to the redline. By using a small turbo and combining it with VTEC, albeit with the cam lift working in reverse – high lift at low revs and low lift at high revs due to the turbo working more effectively at low engine speeds with the high lift cam – the power delivery lacks the top end VTEC kick of old and actually feels less raucous for it, even though a glance at the speedo suggests you are travelling at much higher speeds than any previous generation car would be capable of in the same time frame. The good news is

that, as the VTEC is completely variable, tuners will have a lot of scope for varying the cam settings for use with larger turbos and bigger boost applications in the future.

A helical limited-slip differential delivers the power to the road very effectively and allows you to deploy all 306 ponies in a controlled manner, limiting wheelspin and maximising grip. The age old problem of torque steer with powerful front-wheel drive cars has been all but negated with the new Type R through a trick dual-axis strut design and precisely balanced drive shafts. Stomping on the go pedal out of tight corners proves that the design works a treat.

Throwing the Type R around the track also highlights the benefits of its sophisticated adaptive damper system. The system uses sensors to continuously monitor the car's motion and automatically adjusts the damping force of individual dampers to keep the body flat through acceleration, braking and cornering, improving grip, handling and stability at speed,

while allowing a more supple ride under normal driving conditions. You can feel the system working when the car resists dive when the big Brembos bite, and stays flat when cornering on the limit. It's clever stuff, and means simply slapping on a set of coilovers would likely do more harm than good to the Type R's handling, so a more considered solution will have to be developed for tuners wanting to give improvements over the stock system, but we've no doubt they will come, it'll just be a matter of time.

Another new bit of tech for the Type R is the addition of the dash-mounted +R button. On track we push it and the dash lights change from white to red, it also sharpens the throttle response, engages more torque at lower engine speeds, quickens the steering and stiffens the dampers. The stability control is also relaxed to allow you to have more fun before it will intervene. It's a cool system, that does have an effect you can feel, but in the future we can see mappers taking



WHAT THE TUNERS THINK...

ROB MITCHELL
TDI NORTH

'I REALLY LIKE THE LOOK OF THE CAR AND ITS 'RING LAP TIME PROVES IT'S GOT THE PERFORMANCE OUT OF THE BOX. I'M EXCITED AT THE PROSPECT OF AN EVEN HOTTER VERSION THAT WE'VE HEARD RUMOURS ABOUT, TOO. FROM A TUNING POINT OF VIEW, THE FACT THAT THIS CAR IS GOING GLOBAL MEANS THERE WILL BE BIG DEMAND FOR TUNING OPTIONS, SO I'D LIKE TO THINK THE LIKES OF HONDATA AND HKS WILL GET ON IT STRAIGHT AWAY AND START MAKING UPGRADES. ONCE SOMEONE FINDS A WAY TO REMAP THEM, I SEE THAT AS BEING A REALLY POPULAR ROUTE AS IT WILL BE A CHEAP AND EASY WAY TO UNLEASH A LOT MORE POWER. WE'D ALSO LOOK AT TWEAKING THE GEOMETRY TO IMPROVE THE HANDLING AND MAKE IT MORE FOCUSED FOR THE TRACK. I DEFINITELY THINK IT WILL BE BIG, ESPECIALLY ONCE THEY ARE OUT OF WARRANTY AND PEOPLE DON'T WORRY AS MUCH ABOUT INSTALLING UPGRADES.'


MAZ CHRISTOFI
HONDA

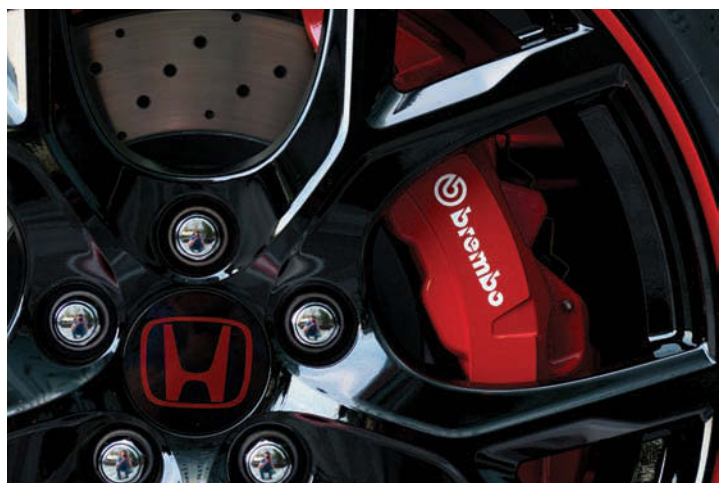
'I LOVE THE NEW CAR. IT'S NOT AS BONKERS AS THE CONCEPT, BUT IT'S COOL. IT'S ABOUT TIME HONDA MADE A TURBO CAR. IT'S THE ONLY WAY THEY COULD KEEP UP WITH THE COMPETITION! I'D LOVE TO GET MY HANDS ON ONE. IF HONDATA CAN CRACK THE ECU, I CAN SEE REMAPS UNLEASHING AN EXTRA 50-60BHP EASILY. HOPEFULLY WHEN THE HONDA PURISTS SEE WHAT IS POSSIBLE WITH THIS CAR, IT WILL CHANGE THEIR ATTITUDES TOWARDS TURBO'D HONDAS. IF IT TAKES OFF IN THE USA AND THE TUNERS OVER THERE AND IN JAPAN START DEVELOPING PARTS, I CAN SEE IT TAKING OFF MASSIVELY IN THE UK TOO. WE JUST CAN'T DO ANYTHING BEFORE SOMEONE DEVELOPS THE PARTS, WHICH IS VERY EXPENSIVE TO DO IN THE UK AS WE DON'T HAVE THE NUMBERS TO SELL IN ENOUGH QUANTITY TO BRING DOWN THE COST. BUT ONCE THEY'RE AVAILABLE, YOU CAN BE SURE: WE'LL BE ALL OVER IT!'

RICHARD ALBANS,
TTS PERFORMANCE

'HONDA MAKES GREAT CARS WITH GREAT ENGINES, SO I'M EXPECTING A LOT FROM THE PACKAGE. WE'VE BEEN DOING SUPERCHARGER CONVERSIONS ON HONDAS FOR YEARS AND HAVE A LOT OF EXPERIENCE WITH FORCED INDUCTION ON VTEC ENGINES, AND EVEN MAKE OUR OWN INTERCOOLERS, SO FEEL WE HAVE AN ADVANTAGE WITH THE NEW CAR BEING TURBOCHARGED AND ARE LOOKING FORWARD TO SEEING WHAT WE CAN DO WITH IT. THE MAIN THING WILL BE UNLOCKING THE ECU OR DEVELOPING AN INTERFACE THAT WILL ALLOW YOU TO REMAP THE CAR. I SEE THAT AS BEING A HUGE AREA FOR FUTURE TYPE R TUNING, FOR SURE. IT MAY EVEN ENCOURAGE PEOPLE TO BUY THE OLDER CAR AND FIT A FORCED INDUCTION SETUP. OUR STAGE ONE SUPERCHARGER KIT COSTS £4K FITTED AND WILL GIVE AN FN2 THE SAME POWER AS THE NEW FK2 FOR A LOT LESS CASH, WHICH IS CERTAINLY SOMETHING TO THINK ABOUT!'

advantage of the setting for switching between much more aggressive maps and boost levels, turning your Type R into a real animal at the touch of a button!

So after being behind the wheel for five laps of the Slovakiaring, then a further two in the passenger seat with Honda's almost-tame BTCC racing driver Gordon Shedden at the wheel – to show us what the Type R could really do! – we are left suitably impressed and with a serious grin slapped across our faces. Not only is this Type R the most powerful car to wear the badge, it's also unquestionably the best. But even more exciting than that, by ditching their traditional NA route of engine production and finally embracing turbo technology, Honda has made a Civic Type R that has got by far the most potential for further tuning than anything that has gone before. Honda diehards may not like it, but the old NA powered Type R has met its end and the new king of the hot hatches is set to reign for some time to come! 



TGM sport Racing

HONDA TUNING SPECIALISTS
...and much much more!

- Full professional body kits fitting service
- Race and performance car paintwork
- Race car and tuned car suspension set up
- Vehicles serviced

MUGEN HKS



Tel: 01252 811972
Fax: 01252 811746

TGM Sport, Sankey Lane, Cove Road, Fleet, Hants GU51 2RS
E-mail tgmsport@aol.com Website www.tgmsport.co.uk



Sytec[®] FUEL TECHNOLOGY

MOTORSPORT DIVISION
Tel: +44 (0) 1784 493 555
Fax: +44 (0) 1784 493 222

The choice of professionals



Racing
Rallying
Sprinting
Hill Climb
Drifting

- 1:1 RATIO
- FINE ADJUSTMENT
- RANGE 15.0 - 90.0 psi

Colours available:

- Blue
- Purple
- Red
- Polished Silver
- Black

- MAINTAINS SET PRESSURE (HELPS WITH MAPPING)
- AUX. GAUGE PORT
- RANGE OF HOSE fittings
- LIGHTWEIGHT ALUMINIUM

Part No.	Description	Price
MSV 000	Valve / 1/8 nptf thread (female)	£102.60
MSV 001	Valve / 8mm dia. hose tails	£104.76
MSV 002	Valve / Jic - 6 inlet, 8mm outlet	£106.86
MSV 003	Valve / Jic - 6 inlet & outlet	£110.16
MRB 001	Competition mounting bracket (lightweight aluminium)	£6.90

Web: www.glencoeltd.co.uk PRICES EXCLUDE VAT @ 20%
Email: sales@glencoeltd.co.uk

2015 RANGE

ROTA
Engineered for Performance



The UK's largest Lightweight & Drift ranges



MXR
18x9"/10"/11"

RT5
17x9"/18x8.5"/18x9.5"

Kyusha
15x7"/15x8"/15x9"/17x9"/17x9.5"

Drift Wheels:

- 17x9" From £165
- 17x9.5" From £170
- 18x8.5" From £210
- 18x9" From £220
- 18x9.5" From £230
- 18x10" From £240
- 19" From £240

See the full range now at:

RARE RIMS
.CO.UK

price per wheel, prices include VAT

Lightweight Wheels

- 15" from £117
- 16" from £127
- 17" from £145
- 18" from £150

From 4.9KG!



Titan
17x7.5"/17x8"

GRA
17x7.5" / 18x7.5"

Recce
17x7.5" / 17x8"

GT3
15x7" / 16x7" / 17x7.5"

GR6
18x7.5"

Over 14,000 wheels in stock
available for next day delivery!

Many different styles, sizes,
finishes, offsets & widths available

Upload your car now to our
virtual fitting bay



www.rarerims.co.uk

t: +44 (0) 1363 777 007 e: wheels@rarerims.co.uk

JAPSTUFF

BRINGING YOU THE HOTTEST NEW PRODUCTS ON THE JAPANESE TUNING SCENE

Every month we bring you the latest and greatest products on the Japanese tuning scene. We always showcase a 'Red Hot' product at the front of the section and also highlight the 'must-have'

products at either end of the budgetary scale.

This way you can decide whether to save your pennies to afford the 'Big Spender' or simply splash a little spare

pocket change on the more affordable 'Chump Change' product. We hope you enjoy the section but, as usual, if there's anything you think we can do better, then please let us know. Until then...enjoy!

REDHOT PRODUCT

JASS PERFORMANCE STAINLESS INTERIOR TRIM FOR MAZDA MX-5

Let's face it, all editions of Mazda's magnificent MX-5 look fantastic, and that's primarily why so many owners of the world's most popular roadster choose to apply only the subtlest of aesthetic updates when personalising the appearance of their cars. Automotive styling outfit, Jass Performance, has taken note, and has produced a range of classy stainless steel parts that can be used to sympathetically enhance the cabin of the sporty two-seater. Instrument cluster bezels, radio controls, needle caps, vent rings, gear knobs, gearstick and window switch surrounds, cup holders, sill covers and heater panels are just some of the products available to buy direct from Jass's recently launched online store (with more snazzy stainless joy about to be added to an already rich back catalogue!). Product manuals, fitting instructions, technical articles and a discussion forum also feature on the company's website, and we'll be sure to bring you details with regard to the Honda, Toyota and Nissan parts that Jass Performance is about to bring to market.

Price: From £10 (vent rings) to £62 (tombstone and gear surround trim for Mk2/Mk2.5)

Contact: www.jassperformance.com





MISHIMOTO 'LIQUID CHILL' COOLANT ADDITIVE

Long recognised as a master manufacturer of engine cooling apparatus, heat protection specialist, Mishimoto, has released details of a simple, effective coolant additive that drops directly into your car's expansion tank or radiator. 'Liquid Chill' is available in both neat and diluted mixtures, and is suitable for use in any liquid-cooled engine. This is a 100% biodegradable, non-corrosive and non-toxic additive that Mishimoto claims will reduce engine operating temperatures in road cars, racecars and trucks. Furthermore, it's compatible with all existing anti-freeze products, and it should help to prevent future internal engine corrosion while simultaneously reducing any pre-existing build up of crud that might otherwise be threatening to block the waterways of your car's powerplant. Visit the Mishimoto website for further information and product videos.

Price: From £14

Contact: www.mishimoto.co.uk or call 01384 897476

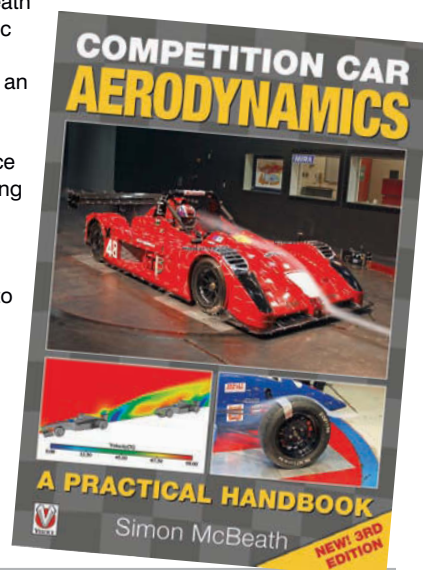
AERO ESSENTIALS BOOK

Now in its third edition, Simon McBeath's brilliant 'Competition Car Aerodynamics' is a must-have for the bookshelf of the discerning petrolhead. The title of this beautifully presented, 300+ page hardback tome might suggest that it is the reserve of those building outlandish racing cars, but there has seldom been such an all-encompassing point of reference for those who want to understand the impact of fitting splitters, spoilers and other airflow devices to their road-going rides. Illustrated with full-colour photographs and written in clear, concise prose, the book takes designers, competitors, students and armchair enthusiasts on a tour of fascinating case studies (examining the methods of Formula One, BTCC and club racing teams) while leading the reader through the dark art of wind tunnel testing. More importantly, McBeath tackles key aerodynamic devices 'one at a time' while emphasising how an integrated, balanced airflow package will improve the performance of your car without having to break the bank. In short, this is the most comprehensive, comprehensible guide to automotive aerodynamics that you're likely to find.

Price: £40

Contact:

www.veloce.co.uk or
call 01305 260068
(ISBN 978-1-845847-76-0)



TITAN MOTORSPORT CARBON-FIBRE THROTTLE BODIES FOR HONDA K20A ENGINE

Titan Motorsport has released details of a new-to-market throttle body kit for Honda's popular K20A engine (as found in the Type R variants of the Civic EP3 and Integra DC5). Carbon-fibre trumpets ensure a smooth, lightweight finish with vastly improved internal airflow, while each trumpet features a 7° taper that has been designed to produce an airspeed-increasing vortex effect for optimum throttle response. Titan's offering is far lighter than conventional DCOE twin-throttle bodies, and a roller bearing sits either side of each butterfly in order to achieve smooth, reliable operation at all times. A billet alloy manifold with a matching fuel rail is included as part of this excellent induction system, and the kit's tuned length of 180mm is ideally suited for both low-end torque and high-end power applications. Titan Motorsport throttle body solutions are manufactured in the UK, and buyers will receive this slice of carbon cool in its fully assembled form.

Price: £1728

Contact: www.titan.uk.net or call 01480 474402



BIG SPENDER

B-G RACING STRING LINES

B-G Racing claims that its motorsport-inspired string line kits are the easiest and most accurate way to achieve four-wheel alignment on most cars. Featuring fully adjustable frames and rubber-coated hooking arms, all of the supplied tubes and mounting equipment are interchangeable to allow for universal fitment. The string bars themselves are split into three sections and include a number of pre-machined grooves for the strings to attach to (thus making the equipment suitable for cars of varying widths). Comprising front and rear adjustable frames made out of high-grade mild steel with a durable powdercoated finish, each kit is supplied with various lengths of zinc-plated tube and aluminium bars with an anodised coating, not to mention the string lines themselves. A handy nylon carry bag is also available to buy, making transportation of the dismantled kit an absolute doddle – ideal for those who need to check their wheel alignment settings across race weekends.

Price: £323.99

Contact: www.bg-racing.co.uk or call 01268 764411



AP COILOVERS AND LOWERING SPRINGS FOR SUZUKI SWIFT (2005+)

German suspension expert, AP, has released details of its adjustable coilovers and lowering spring kits for Suzuki's second and third generation Swift. Available for non all-wheel drive three and five-door variants of the popular supermini, the lowering springs deliver improved handling and a drop in ride height of 30mm at each end of the car, while the adjustable coilovers benefit from KW damping technology and allow for a chassis drop of between 30mm and 65mm! The resulting combination of sportiness, comfort and TUV-certified safety makes the bright blue parts an excellent upgrade for suitable Swifts, and the rugged, zinc-plated steel components that make up each kit are weather-resistant thanks to a protective final finish. How low will you go?!

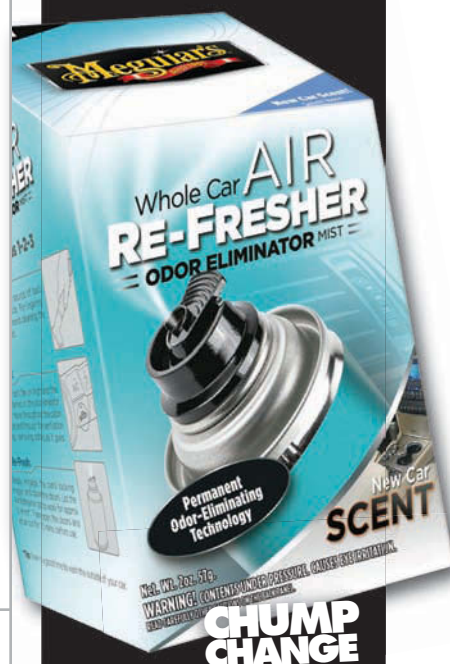
Price: Coilover kit £495, lowering springs £152

Contact: www.demon-tweeks.co.uk or call 0844 815 8630



MEGUIAR'S AIR REFRESHER ODOUR ELIMINATOR MIST

It's all very well keeping the outside of your motor looking fresh, but what about that pongy cabin space?! Meguiar's has the answer: the respected car care



company has developed an in-cabin air refresher that removes the toughest of odours and banishes lingering smells by making use of your pride and joy's air recirculation system. Simply fire up the car and set its blower controls to the recommended setting before cracking open the supplied Meguiar's magic mist! The 71g canister will release its contents into the cockpit, permanently eliminating whiffs from even the most difficult to reach areas. This exciting product is safe to use, it will leave a 'new car' smell throughout, and it won't damage your leather, cloth or plastic upholstery. Better still, it will only set you back a bargain-busting tenner!

Price: £10

Contact:

www.meguiars.co.uk or head over to your nearest branch of Halfords

Discover detailing.

LEARN THE SECRETS OF
AUTOMOTIVE DETAILING
AT WAXSTOCK 2015.

FROM SIMPLE CAR CARE HINTS
AND TIPS TO MACHINE
POLISHING ADVICE FROM THE
PROS, YOU'LL DISCOVER MORE
DURING ONE DAY OUT THAN
FROM SPENDING WEEKS ONLINE.

YOU CAN ALSO SAVE HUNDREDS
OF POUNDS ON DETAILING
GEAR, WITH DOZENS OF
EXCLUSIVE OFFERS ON
SPECIALIST PRODUCTS.

WATCH A LIVE DEMO. TRY A
MACHINE POLISHER FOR SIZE.
SEE CARS COMPETE IN THE
DETAILING WORLD SHOWDOWN.

ALL AT WAXSTOCK, EUROPE'S
LARGEST CAR CARE EVENT.

FOR ONE DAY ONLY.

DETAILING
WORLD



detailing - valeting - car care

WAXSTOCK 2015

SUN 26 JULY 2015. RICOH ARENA, CV6 6GE. STANDARD ENTRY £15 [SEE WWW.WAXSTOCK.COM FOR FULL INFORMATION].



We offer fitting service too!

knight racer

Bodykits, Carbon, Customising
& Performance Tuning Parts

UK's largest stockist and Retailer of
R35 GT-R Carbon Aero and Styling

GT R



R34 GTR Lower
Splitter Undertray



Wider / Vented Front Wings
R33, R34, S14, S14a, S15



350z
Front Bumpers



R33 GTR Full Rear
Quarters for GTS



Supra MKIV
TRD Spoilers



Universal
Bonnet Vent



R35 GTS S2
Nismo Carbon Bonnet



R35 GTR Ducktail
Carbon Bootlids



EP3 Type-R
Mugen Carbon Grilles



R35 GTR High Power
Intake Kits



GT86 Rocket Bunny



RX7 RE-GT
Widebody Kit



GT86 / BRZ Lighting and Accessories



Builders of the UK's first
RB Wide Arch GT86

Carbon Aero developed & tested at Nurburgring



Knight-Racer 800R GTR
Full KR Carbon Aero with
MY12 Full Dry Carbon Front End Conversion

LOADS MORE OFFERS LISTED ON OUR **ONLINE SHOP** **01908 379118**
www.knightracer.com

Knight-Racer Ltd
Unit 6, 16 Watling Street, Milton Keynes, MK2 2BL

BRITISH **DRIFT** CHAMPIONSHIP

THE UK'S PREMIER DRIFT CHAMPIONSHIP

ROUND 3

TEESSIDE 11TH-12TH JULY



TICKETS & INFORMATION AVAILABLE AT
WWW.THEBRITISHDRIFTCHAMPIONSHIP.COM

@UKBDC UKBDC BRITISHDRIFTCHAMPIONSHIP

JAP SPEED
JAP SPEED



CORBEAU

GARAGE-D
STREET * DRIFT * CIRCUIT The way forward.



EPR
EPRACING
FOR ALL YOUR MODIFYING NEEDS!

ROTA

K&N
THE WORLD'S BEST AIR FILTER



THE GARAGE+



PROJECT WRX THE BUILD BEGINS

The long awaited engine rebuild starts here. But rather than lose the car we've opted to build a new engine and swap it when the time's right. We've gone to Impreza specialists Kamikaze Racing for the build (you should all know their crazy wagon driven by Jake Archer). The guys

there have advised us to use V3-4 heads and also an upgraded gearbox from a 2.5 Hawkeye (luckily they had one sitting around wanting a new owner) and we've also ordered a stage 2 competition clutch from EuroSpec.

So we've sent over the Advanced Automotives stroker

kit and some other goodies we've collected to the Kamikaze boys. Although the stroker kit is good for up to 500bhp we're aiming for a more sensible 400bhp. More to follow next month...

CONTACTS

Advanced Automotives

www.advancedautomotives.co.uk

Kamikaze Racing

www.kamikaze-racing.co.uk

Keith Michaels Insurance

www.keithmichaels.co.uk



PROJECT MX-5

Last month we introduced our new MX-5 project. It's a pure delight to drive but, being a cheapy, it needs some serious love and attention.

The first job was to make the brakes safe. Rather than just chucking standards on we opted for EBC's uprated grooved versions with Yellow Stuff pads. Literally a straight swap which couldn't be easier. Not stopping at just brakes, (see what we did there?) the credit card got a pounding and a new set of wheels have been ordered from RareRims. The 8x15in Rota Kensei comes in a

range of colours, and we chose white with a polished lip. Although tyres haven't been sourced yet, we couldn't resist putting them on to see what they'll look like. The offset is so perfect, for which we thank Ben at Rare Rims for the advice. Also, of course, the car needs to be lowered, so we've ordered some Vmaxx fully adjustable coilovers. More on this and the wheels next month...

CONTACTS

EBC Brakes

www.ebcbrakesdirect.com

Rare Rims

www.rarerims.co.uk



MODIFIED CAR? or standard of course

Be correctly insured, it doesn't cost as much as you'd think



“We trust them with ours”

Japanese Performance Magazine Project car

Insurance as it should be - you are a person not a policy number!

keithmichaels.co.uk

0800 542 2141 / 0208 329 1150

MARKET LEADER
IN SPECIALIST AND
PERFORMANCE
CAR INSURANCE

COMPETITIVE QUOTES FOR
PERFORMANCE
MODIFIED
TRACK COVER
YOUNG DRIVERS 23+
LIMITED MILEAGE
CLUB DISCOUNTS

LEADING THE
WAY FOR
JAPANESE
PERFORMANCE
CARS FOR OVER
20 YEARS

CALL US NOW FOR A FRIENDLY
NO NONSENSE QUOTE



31 JULY - 2 AUGUST | SANTA POD RACEWAY

**Weekend
Tickets
from just £60**

*Booking Fee
applies

ULTIMATE STREET CAR

USC

**THE
LARGEST
LOUDEST
HOTTEST
AND FASTEST
CAR FESTIVAL
IN EUROPE**

Legendary Music Line Up including:



**Track
Fee £20
For 4 Runs**

**Track Open
All 3 Days**

Including... **FWD & Jap Drag Series** Run What Ya Brung **Sound Off Competition**
Flame Out & Burn Out Competition **Autoglym Show & Shine** **Jet Car** **Fun Fair**
Mr & Miss USC Competition **Trade Village** **Weekend Camping inc. Club Pitches**



For Tickets & Info Call 01234 782828 * www.ultimatestreetcar.com

Advance ticket prices available until Fri 24th July - standard price thereafter. Kids under 13 go free (3 per paying adult). See website for full terms & conditions on entry. Camping included for 'multi-day' ticket holders, free parking with all tickets. No pets, glass bottles or unlicensed vehicles on site. Santa Pod Raceway, Airfield Rd, Podington, Wellingborough, Northants, NN29 7XA. Jct 14 & 15, M1. Tel 01234 782828

THANKS & CONTACTS

www.speedlinecorse.co.uk

www.toyo.co.uk

www.facebook.com/tread.mark.9

And of course... Adz!

WORDS & PICS: PAUL COWLAND

PROJECT WHITE STUFF WHEELS OF FORTUNE

PROJECT WHITE STUFF GETS SOME NEW SPEEDLINE AND TOYO ROLLING STOCK TO SET OFF ITS NEW WRAP-FREE EXTERIOR

You'll probably remember that, last month, I was knee deep in age-old vinyl as me and the team from Autoglym toiled deep into the night to remove the old wrap from Project STI. After what felt like a lifetime later, and after a good machine polish and a little dash of rectificational paint here and there, the old STI was looking pretty smooth. What lay in front of me now was a smart, white canvas with which to make my next move – and as I stood examining the almost bald tyres and kerbed OEM wheels, it wasn't hard to work out!

Keen to try something a little different with this car – and step away from the obvious JDM influences, towards something a little more European and OEM+, I called on David Williams from

Speedline for a really good deal on a set of their new Imperatore rims. These stunning wheels boast all of the usual features of the brand, including exceptional lightness, strength and build quality. It's a departure for most Speedline fans as it doesn't look like one of the firm's rally wheels, instead using flawless black paint and heavily protected diamond finished surfaces to give a real cutting edge look. On the STI, I felt it would look superb.

Once the wheels had arrived, I needed some tyres. For the last 15 years, I have almost always fitted Toyo to my Japanese rides. Not only do they always look 'right', but the Proxes range has never let me down on road or track, offering great levels of grip in both the wet and dry.

The latest Proxes T1 Sport picks up the baton from the classic T1-S and T1-R and adds a few modern twists into the mix in terms of compound and case design. The result is a tyre that looks superb, sticks like hot snot to a blanket and in the case of the 245/35/ZR19 size that I went for, would sit perfectly square on the new Speedlines. I know that a bit of stretch is all the rage with the cool kids at the moment, but believe an old stager, if you want to go quickly, you need square shoulders on your tyres!

So that just left fitting, and again, I wasn't going to trust my safety (and new rims!) to anyone less than the best. Lucky for me, Ronny Demera owns Treadmark Wheels and Tyres just down the road in Colwick, Nottingham, and

in six minutes flat I can be at his place, having a brew and watching him do a textbook job of fitting and balancing my new shoes for me. Using hidden stick-on weights and a great deal of love and care, Ronny soon had them fitted up and out front ready for me to take away.

So that left the bolting up. Should I do it myself, or should I pop round the corner and see my TV sidekick and fellow Z-list celebrity Adam Hornby for yet another brew while he popped them on in the sunshine? Purely to be sociable you understand, I arrived unannounced and persuaded him he needed to get them on...which he did with the greatest of good grace. Looking at the state of what was left of the nearside front tyre, it looked like it was just in the nick of time, too. Perhaps an alignment is in order next I think, so I can really exploit those Toyos!



TOYO PROXES AND SPEEDLINE IMPERATOIRES GIVE A FRESH NEW LOOK

CUSTOM & OFF THE SHELF

STREET/STRIP/RALLY/DRIFT

HIGH PERFORMANCE PISTONS

ROSS
racing pistons

Hundreds of proven race winning Sport Compact piston designs available to fit any engine combination. All drawing on over 35 years of winning performance! Ross can custom design and manufacture pistons for any application!

FACEBOOK.COM/ROSSPISTONS



310.536.0100

WWW.ROSSPISTONS.COM



New Catalog Now Available!

Japanese Import

Premium Insurance
New & exclusive schemes available now!



mayfaironline
insurance & mortgage consultants

Performance
INSURANCE

A member of Mayfair Insurance & Mortgage Consultants Limited

mayfaironline.co.uk

Tel: 08444 935756

MayfairPerformanceInsurance

@Mayfair_INS

Calls may be monitored for training purposes.

Mon-Thurs: 9am-7.30pm / Fri: 9am-5.30pm / Sat: 9am-4pm

Japanese Car Insurance

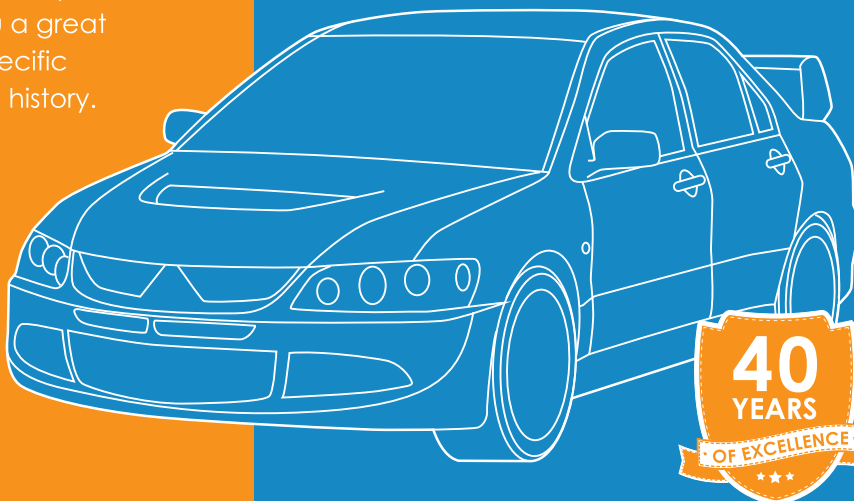
Adrian Flux know how much you love your Japanese car, that's why we are dedicated to finding you a great policy tailored to your specific requirements and driving history. Call us today for a free, no obligation quote.



0800 081 8989
adrianflux.co.uk

Authorised and regulated by the Financial Conduct Authority

Get Your Insurance In Gear



Benefits available include:

- FREE Legal Cover
- Limited Mileage Discounts
- Club Discounts
- Modifications Cover
- Grey Imports Cover
- Breakdown Cover



If you're serious about **Japanese performance cars**
then call the insurance experts

mark richard quality car insurance at the most competitive price

- all types of performance cars including grey imports
- subaru impreza specialists • we look after our customers
- great value • breakdown cover also available



call us on
01275 792270

Authorised & Regulated by the Financial Conduct Authority

jap cover.co.uk

insurance for **specialist** japanese cars

SEPTEMBER ISSUE ON SALE 13TH AUGUST 2015

Advertisement Index

ABP Motorsport	52,53
Action Clutch	35
Adrian Flux	95
AP Racing	36
BC Racing (Apex Performance)	100
BDC (Japspeed)	91
Carbon Goodies	26
Cobra Sport	37
Collins Performance Engineering	6
Competition Clutch	15
CoordSport	44
D2 (Apex Performance)	81
DoDo Juice	90
EBC Brakes	8
Eibach UK	31
EP Racing	76
Funky Power	37
Glencoe	60,86
Hose Solutions	61
Indigo-GT	25
Jap Performance Parts	68
Japspeed	45
K-Sport (Apex Performance)	98
K&N Filters	26
Keith Michaels Insurance	93
Knight Racer	90
Lateral Performance	69
Mark Richard Insurance	96
Mayfair Performance Insurance	95
Ohlins (Apex Performance)	99
Polybush	44
Racing Beat Europe	60
Rare Rims	86
Ross Racing Pistons	95
Santa Pod Raceway	93
Sky Insurance	96
Sumo Power	10,11
SiperPro Europe	27
Tegiva Imports	4
TGM Sport	86
Toyo Tires	17
TTS Performance	76
Whiteline	68

**FREE
MINI MAGS!**
JP'S GUIDE TO
BUYING AND TUNING
THE TOP 9 JAPANESE
PERFORMANCE ICONS
PART TWO OF THREE
NEXT MONTH!

**TOUGH AS NAILS NISSAN PULSAR / SEXY RE-AMEMIYA KITTED RX-7
WORLD'S WILDEST AND WIDEST IMPREZA / TURBO'D INTEGRA
CORNERING TECH / AND MUCH MORE...**

SUBSCRIBE & SAVE!

**PAY JUST £2.96*
PER ISSUE INSTEAD
OF THE £4.50
NEWSSTAND PRICE**

*BASED ON TWO-YEAR UK SUBSCRIPTION

**GUARANTEE RECEIVING YOUR COPY OF
JAPANESE PERFORMANCE EVERY MONTH,
DELIVERED DIRECT FROM THE PRINTER TO YOUR
DOOR - BEFORE IT APPEARS IN THE SHOPS!**

	12 ISSUES	24 ISSUES
UK	£43.00	£71.00
EUROPE	£63.00	£100.00
REST OF WORLD	£75.00	£125.00

t. 01883 731150

e. SUBSCRIBE@CHPLTD.COM

w. JAPANESEPERFORMANCEMAGAZINE.CO.UK

Available via Apple Newsstand,
iTunes, Google Play for Android
market or www.pocketmags.com

Latest Issue & Back Issues just £2.99 each

Subscribe for one year or six months

Download to your iPad, iPhone, Android
device, Mac, PC or Kindle Fire

**A digital subscription to
Japanese Performance
is the perfect way to
treat yourself!**





KSport carbon ceramic brake kit



KSport brake kits - tried, tested and proven!

They offer unbeatable value for money and yet perform like kits costing three times the amount. KSport brakes provide amazing performance for fast road and demonstrate their ability to provide the ultimate stopping power in full race environments.

The packages will not only suit road users but also those using their cars on track days, at the Nurburgring, in sprinting, rallying or in circuit racing.

If KSport brakes can stop the 800bhp, carbon kevlar, ground effect, nitrous equipped KSport race car without issue then you can be confident that they will perform on your own vehicle.



BRAKE UPGRADE KITS

Each kit comprises of all parts required for fitting

- High rigidity aluminium calipers
- Precision machined lightweight bells
- Large diameter racing grooved rotors
- High quality braided brake hoses
- Mounting brackets and complete install pack

330mm 8POT Kit

356mm 8POT Kit

£899

Including VAT

£999

Including VAT

+ PADS

KSport

UK sourced pad, new for 2011.
Excellent fast road and mild track.

£79.99

EBC Redstuff

Performance Brake Pads.
Low dust, ideal for heavier cars

£112.78

EBC Yellowstuff

Performance Brake Pads.
Superb cold bite, track and road.

£117.02

EBC Bluestuff

Performance brake Pads.
Long lasting, track use.

£128.73

Ferodo DS2500

Excellent fast road and mild track
with superb cold bite.

£264.44

Pagid RST3

The pinnacle of fast road and track
pad technology.

£262.21

CALL 01274 683 633

BUY KITS ONLINE
WWW.KSPORT.CO.UK

- Wide range of applications available
- Full fitting kit supplied
- No specialist tools required



SCAN THE CODE ABOVE TO WATCH
THE LAP AROUND DONINGTON





ADVANCED SUSPENSION TECHNOLOGY

Perfection in Performance

The Öhlins way since 1976

The Road & Track range finally puts Öhlins incredibly high standards of suspension research, development and manufacture within reach of the discerning car enthusiast.



Dual Flow Valve Technology is what sets Öhlins apart from its competitors. Only Öhlins has DFV technology available on its road and track suspension. Find out more on our website or talk to one of our specialists today on 01274 683 633.

Current Applications

0% finance available

PART NO	VEHICLE APPLICATION	PRICE (INC VAT)
BMS MI00	BMW 3-series E90 2005-, set	£1,570
BMS MI10	Mini RE16 2002-2007, set	£1,600
BMS MI20	Mini R56 2007-, set	£1,560
BMS MI30	BMW M3 E46, set	£1,940
BMS MI40	BMW M3 E92, set	£2,110
BMZ MN01	BMW 1M Coupe E82, set	£2,315
BMRT GN10	BMW 1 Series F20/F21, set	£3,645
HOS MI20	Honda S2000 AP1/AP2-, set	£1,725
HOS MI30	Honda Civic TypeR FD2 2007-, set	£1,795
LES MI00	Lexus IS 350/ GS 460/ IS-250, set	£1,965
LOV 1-4D00	Lotus Elise/ Exige, set	£2,125
MAS MI00	Mazda RX8 SE3P 2003-, set	£1,740
MAS MI10	Mazda RX-7 FD3S 1991-2002, set	£1,715
MAS MI20	Mazda MX5 Miata NA/NB 8C 93-05, set	£1,550
MAS MI30	Mazda MX5 Miata NC/EC 8 2005-, set	£1,405
AP9009	Mitsubishi Lancer Evo 4-6*, set	£2,170
MIS MI00	Mitsubishi Lancer Evo 7-9, set	£1,835
MIS MI10	Mitsubishi Lancer Evo 10, set	£1,960
NIS MI00	Nissan 350Z Z33 2002-, set	£1,875
NIS MI10	Nissan Skyline GT-R BNR34 99-02, set	£1,795
NIZ MI30	Nissan GT-R R35, set	£2,865
OPV 1-4E00	Opel Speedster/ Vauxhall VX220, set	£2,125
POS MI10	Porsche 996 GT3, set	£1,490
POS MI20	Porsche 997 Carrera, set	£1,530
POZ MI00	Porsche 996 Carrera, set	£2,005
POZ MN02	Porsche 911 Carrera 4/ Turbo, set	£2,490
POZ MN04	Porsche 911 GT3/ GT2 (997)	£2,160
POZ MN05	Porsche 911 Carrera 4/ Turbo, set	£2,195
VWS MI10	Seat Leon / Leon Cupra	£2,065
VWS MI10	Skoda Octavia RS 1Z, set	£2,065
SUS MI00	Subaru Legacy BP5 2003-, set	£1,960
SUS MI10	Subaru Impreza GRB 2007-, set	£2,005
SUS MI20	Subaru BRZ / Toyota GT86 set	£2,200
SZS MI00	Suzuki Swift Sports ZC31S 05-08, set	£1,175
SZS LI00	Suzuki Swift Sport 2010-, set	£1,365
SUS MI20	Toyota GT86 / TRD	£2,200
VWS MI10	VW Golf VI / Scirocco, set	£2,065

* NOTE: The Evo 4-6 kit is not an official Öhlins product.

PRICES INCLUDE VAT. SEE WEBSITE FOR CURRENT OFFERS. Please note that prices are subject to change. Prices correct at time of press.

0% finance available

Buy and apply online today



www.ohlinscoilovers.co.uk



BC

street & circuit
PERFORMANCE SUSPENSION SYSTEMS

BUILT WITH PRECISION MEASURED BY SUCCESS

BC Racing are renowned worldwide for their high performance suspension systems. Now available for over 500 vehicle applications.

FEATURES

- Pillowball upper mount
- Camber adjustable top mounts
- Aluminium top plates
- 30 way adjustable damping
- Adjustable spring platform
- Height adjustable bottom mount
- Bearing mounted spring platforms
- Dust boot to protect damper seals
- High quality body finish
- Springs and accessories available

* features depend on application



EVERY DAMPER DYNO TESTED

Every BC Racing damper is dyno tested in-house. Our coilover kits are only assembled using matched dampers to ensure equal and efficient damping throughout their range.

Because we only use matched coilovers, you're assured of maximum stability, handling and performance on both the street and circuit.



WIN! A SET OF COILOVERS

Come and set a lap time in the BC Racing F1 simulator.

You'll find it in the BC stand at various shows this year. The fastest time of the day wins a set of BR Series coilovers of your choice. It's free to enter!



TRAX
THE ULTIMATE PERFORMANCE CAR EVENT

Silverstone
Sunday 19th July

PVS
THE PERFORMANCE VEHICLE SHOW

Santa Pod
Sunday 7th June

JAPFEST
EUROPE'S BIGGEST JAPANESE CAR SHOW

Rockingham
Sunday 16th August

30th Anniversary
fordfair
EUROPE'S BIGGEST & BEST FORD FESTIVAL

Silverstone
Sunday 2nd August

Street, fast road and track spec coilovers from just £699

0% FINANCE AVAILABLE



WWW.BCRACING.CO.UK
CALL 01274 683 633

TRADE ENQUIRIES WELCOME. E&OE. PRICES SHOWN INCLUDE VAT. SEE WEBSITE FOR LATEST SPECIFICATIONS



apex
PERFORMANCE

BC
street & circuit

K-SPORT

ÖHLINS

HARDRACE

D2

THE TOPNINE


FIRST OF A THREE PART SERIES

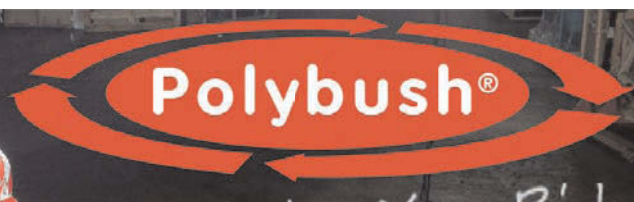
PART 1:
MITSUBISHI EVO IX
TOYOTA SUPRA TT
MAZDA 3 MPS

THE BEST JAPANESE PERFORMANCE CARS TO OWN AND TUNE BEFORE YOU DIE!

Japanese Performance reveals how to bag a beauty and the top tuning tips that work







Polybush®

Revolutionise Your Ride

Reduced MOT costs
Prolonged tyre life
Fit and forget - Excellent longevity
Great noise damping

The number one choice in suspension bushes.

- Controlled suspension movement
- Improved turn-in and stability
- Confident ride
- Excellent longevity
- Fit without additional equipment
- Unaffected by road contaminants



Fit Polybush for precise steering and a controlled ride at all speeds.



Tighten up your suspension by fitting Polybush's 7BA to your Japanese performance car.



Fit Polybush for consistent steering geometry.



Want to reduce understeer? Fit 7AT to your front wishbone for optimum geometry during hard cornering.



**British
Made**



Polybush, Clywedog Road South, Wrexham Industrial Estate, Wrexham LL13 9XS

Tel: +44 (0) 1978 664316 Fax: +44 (0) 1978 661190

Website: www.polybush.co.uk Email: sales@polybush.co.uk A division of BONAPRENE PRODUCTS LTD

WELCOME



No one likes to think about their own mortality for too long, as it can be a pretty morbid experience. After all, once your time is up, it's up, and there's very little you can do about it. However, to ensure we bid farewell to this mortal coil knowing that we have experienced the best that life has to offer, it's only right that we've had the chance to both own and tune some seriously special Japanese machinery. Which is why we have dedicated the next three months to giving you the best opportunity to do just that. With this and the next two issues of *Japanese Performance* you'll also receive a free guide to buying and tuning nine of the best Japanese performance cars to buy and tune before you die.

Broken down into three essential instalments, each edition will concentrate on the buying information and top tuning tips to allow you to both buy and tune three of our top nine. And, so as not to leave anyone out, we've selected an option for front-wheel drive, rear-wheel drive and four-wheel drive in each issue, so whatever layout of driven wheels floats your boat, each month there'll be something to get your juices flowing and stop your cash burning a hole in your pocket.

This month's issue is focused on the Mitsubishi Evo IX starting on page 4, the Toyota Supra twin turbo starting on page 8 and the Mazda 3 MPS starting on page 12. So don't wait until it's too late, get one of our top nine on your driveway and start ticking them off your automotive bucket list. Take our word for it – whichever option you try, it will be more than worth it!

WHAT'S IN?



P4



P8

NEXT MONTH...

Next month sees part two of our series on the top nine Japanese cars to buy and tune and features the Mazda FD RX-7, Honda Integra DC2 and the Nissan R35 GT-R.



P12



mitsubishi evo ix

BUYING GUIDE

FOR OVER TWO DECADES THE MITSUBISHI LANCER EVOLUTION HAS BEEN ONE OF THE BEST ALL-ROUND CARS ON THE SCENE, THE NINTH EDITION OF THE BREED BEING OUR PICK OF THE BUNCH. HERE'S HOW TO BAG A BEAUTY...

The Evo has always had a knack for embarrassing the exotic, whether that be on the track or the morning commute. Lightning acceleration and awesome rally-bred grip and handling enable it to deliver in all weathers, yet that practical saloon format and brilliant value for money as a used buy make it a totally viable head purchase too. Add in lashings of WRC heritage (courtesy of Tommi Makinen's mid-nineties World Rally Championship domination) and virtually limitless tuning potential and you have a recipe for Japanese performance heaven. For many of course the ultimate evolutions have to be the Evo VI and Evo VI Tommi Makinen, produced at the height of Mitsubishi's strangle-hold on the WRC title, but later Evos command equal respect for their even greater technological brilliance and good looks and, because of this, we've selected the last of the 'proper' Evos that spawned multiple rally championship winners, in the form of the Evo IX, as our ultimate Lancer of choice.

WHEELS AND TYRES

Mitsubishi got the Evo handling pretty bang-on from the factory and the stock wheels and tyres work well with the suspension setup, meaning the use of spacers with larger aftermarket alloys is not recommended without serious consideration to the geometry. Consistently incorrect tyre pressures or mis-matched tyres can contribute to uneven tyre wear and affect your Evo's handling.

BRAKES

OE Brembo brakes are good enough for fast road use, but for trackdays you'll need to upgrade. Rear discs can seize on and look for cracks from cross-drilled discs. Any grating noises or pulling to one side under heavy braking suggests the front discs are warped and inspect the calipers for flaking paint, too. A brake fluid change is needed every 18,000 miles.

SUSPENSION

Even though the suspension is rally-car strong, both steering and suspension components can wear out – so drive with the windows down for a period to listen out for any knocking, bumping or grinding noises and check struts and dampers for signs of leakage.

BODYWORK AND INTERIOR

Evos get driven hard, so check the panel gaps for consistency and inner wings and boot floor for ripples which could indicate accident damage. Also check for stone chips – if there aren't any at all, ask why not. Chances are the front-end has been re-sprayed. If you're looking at a grey import, check the underside for rust and evidence of underseal. Trim should be in perfect condition and test every electrical item carefully. Make sure all seats adjust properly and don't forget to test out the water spray system to the intercooler, too.



TRANSMISSION

Original clutches wear out exceedingly quickly – especially if the car has been subjected to regular drag launches – and take around six hours to change and can cost around £900 as it involves moving the gearbox and transfer box. Also, with all that torque, gearboxes have been known to fail, too – difficult changes into first, second, fifth and reverse gears are the most common early indicators. Knocking noises from under the car should set alarm bells ringing, and if the active centre diff pump fails you could be looking at thousands of pounds to fix it. Check that the AYC light illuminates when the ignition is turned on and then goes out after a few seconds, if it doesn't it may point to a problem with the AYC or the diffs, which are very expensive to replace.

CLUBS AND FORUMS

www.lancerregister.com
www.mitsubishi-cars.co.uk
www.evo-owners.co.uk
www.lancer-evo.net
www.mitsioc.co.uk

TECH SPEC

MODEL	EVO IX FQ-300
ENGINE	1997CC
MAX POWER	305BHP @ 6950
MAX TORQUE	297LB FT @ 4400RPM
TRANSMISSION	6-SPEED MANUAL
MAX SPEED	157MPH
0-60MPH	4.7 SECONDS

**PRICE: FROM £12K TO £22K
DEPENDANT ON AGE AND SPEC**



ENGINE

Make sure there are no gaps in the service history.

Overall the Evo IX's MIVEC-equipped variant of the legendary 4G63 motor is pretty tough, but loose vacuum hoses, worn plugs or failed coil packs can cause bad running and failed lambda sensors can result in excessive emissions and poor fuel consumption. Whilst noisy tappets are normal – usually caused through a lack of frequent oil changes causing blockages in the oilways and air to stay trapped in the tappets – any knocking noise from the engine is likely to spell disaster. Tuned engines with higher boost pressures are more likely to blow a head gasket and damage pistons if mapping isn't spot on. Blue smoke can result from failed turbo seals or bearings, while black smoke under acceleration is normal as Evos tend to run rich under load. Lastly, if a decat exhaust has been fitted, you'll need to refit an original catalytic converter to pass the MOT emissions test.



TUNING GUIDE

BEFORE YOU TUNE

Although technically an RS or GT model would be your ideal base for big power – due to the stronger, albeit lesser ratio'd, five-speed (rather than six-speed) transmission – they are import-only and not easy to come across in the UK. On the other hand, the UK FQ models come tuned (albeit mildly) from the factory, coming with a high-flow fuel pump and various other uprated components.

Overall, rather than choosing a particular model, we would look for the best balance of condition, modifications and price tag. For example, buying a car that has already had a fully built engine, RS rear diff and so on could save you many thousands of pounds over doing it yourself if those components are on your wish list.

Also, bear in mind that there's no point in tuning a car that's already got problems, so make sure the car is in good health before anything else.

TUNING PROS AND CONS

For a 2.0-litre production car it's quite remarkable how much power standard components, or at least direct replacement bolt-on parts, can achieve. The engine itself is even stronger than previous Evo models and can take a huge amount of boost. Overall, this means that over 400bhp and 400lb ft can be achieved easily and reliably, with standard road manners, and at an affordable price, too.

The bad news is that the six-speed gearbox fitted to the majority of Evo IX models is weaker than the five-speed fitted to earlier models and the import only GT/RS models, and the weak point that has always plagued Evos – the anti-yaw control (AYC) rear diff – is still an issue.



THE LAST OF THE 4G63-POWERED EVOS AND ARGUABLY THE BEST, THE LANCER EVO IX IS A TUNER'S DREAM; HERE'S WHAT TO DO TO TUNE ONE...

STAGE ONE

'Basic' stage one tuning should take the 2.0-litre 4G63 to around 400bhp and 400lb ft, which sounds a lot, but on the Evo IX it's actually quite simple to achieve.

Although you can install an induction kit, a simple drilled airbox and uprated panel filter from the likes of K&N or Pipercross will remove the restriction of the standard unit.

Next up, a full turbo-back 3in exhaust system, with an uprated turbo elbow will help the engine breathe.

Although the FQ models come with an HKS exhaust as standard, it varies in size along its route, so even this should be replaced with a larger version. Various tailpipe styles and noise levels are available. For track goers, it's worth noting that Milltek systems are quieter than most, which is worth thinking about as many tracks have strict noise limits.

After that, unless you have one of the FQ360 models, which already has one, you'll need an uprated fuel pump. A 255lph pump from the likes of Walbro is good value and comes as a direct replacement for the standard one.

Finally, a remap is needed to make the most of these upgrades and to increase the boost to a suitable level. Thankfully the standard ECU is very capable and many UK Evo tuners are able to remap it using software such as ECUTek.

STAGE TWO

Stage two is pushing the reliability limit of the 4G63's standard engine internals, gearbox and turbocharger, so keeping it under 450bhp and 450lb ft is considered wise for reliability.

A larger intercooler, uprated clutch and bigger injectors are all required, ideally with uprated cams such as GSC S1 or Kelford 264 degree cams. These, along with a suitable remap and boost increase, should be enough to push the standard engine and turbo as far as you, and your tuner, dare.

Away from engine tuning, it is worth upgrading the suspension to a set of height adjustable coilovers. These come in a massive variety from the likes of BC Racing, KW, Ohlins, and Nitron. The choice of what you buy will depend on your budget and what you're planning to use the car for. But whatever you choose, once fitted, get the suspension geometry set-up by a specialist – there is a certain amount of adjustability with the standard suspension arms, meaning that the car's handling can be transformed.

The stock brakes are good, but will likely wear out quite quickly at this level, so an uprated disc and pad combo, along with a brake fluid change, is a better idea than OEM Mitsubishi replacements, and usually cheaper, too. The variety of brakes available is huge, and while the choice of brand to go for is always going to be subject for debate, pad compound is the main question. Hard compound track/race pads are overkill for the road and can wear discs overly fast, while conversely, fast road pads can overheat and become useless when used hard on track. The choice is yours.



STAGE THREE

Now it's time to delve into the engine's internals, which can get expensive, but with 500-550bhp and a similar torque figure achievable with little more turbo lag than standard, and still while fitting direct replacement parts, it's worth it.

First up is a 'long rod' engine rebuild, which would stay at 2.0-litre. This, along with removal of the balancer shaft, gives the car better high rpm reliability. Most good Evo engine builders can build you an engine to this level, and tuners such as Ross Sport can supply a full long-rod rebuild kit if required. The stage 2 cams are still appropriate for this level, although some choose to go to the next stage up, along with uprated valve springs, but that's down to personal preference. A ported cylinder head is another great way of freeing up power and can either be done to your own head, or via a brand new CNC ported head from the likes of Cosworth or CNC Heads.

The standard inlet and exhaust manifolds only start to become restrictive at around the 500bhp mark and expertly ported standard manifolds have been known to be 600bhp+ capable, but aftermarket items are an easier solution. Many manifolds are available with varying price tags, but we would recommend sticking to direct replacement items at this level, saving you unnecessary fabrication work.

A bigger turbo is also needed with turbos like the FP71HTA, HKS7460 and Turbo Technics S205 all being direct replacements for the standard turbo, capable of well over 500bhp with near-standard spool speeds, meaning no noticeable increase in lag.

Combine this lot with larger injectors and a suitable remap, and you will have a very big smile on your face.

Away from the engine, uprated bushes from the likes of SuperPro, Powerflex or Polybush are a good idea, as are thicker anti-roll bars such as those from Whiteline. Strut braces for various points of the car are also worthwhile for tightening up the chassis.

On the braking front, even the impressive stock Brembos really could do with replacing at this level. Thankfully, countless four, six and even eight-pot big brake kits are available from the likes of AP Racing, Alcon, StopTech and many more, giving you an all-conquering Evo that will show up all but the most exotic of machinery on both road and track.



TUNERS

AP Tuning
www.ap-tuning.co.uk
 Arnside Motorsport
www.arnsidemotorsport.co.uk
 EM Developments
www.emdevelopments.com
 Evo Tune
www.evotune.co.uk
 Fusion Motorsport
www.fusion-motorsport.co.uk
 Indigo GT
www.indigo-gt.com
 MA Developments
www.madevelopments.com
 MG Autos
www.mgautos.uk.com
 Motorsport Developments
www.motorsport-developments.co.uk
 Norris Designs
www.norrisdesigns.com
 NR Autosport
www.nr-autosport.com
 Performance Autoworks
www.performance-autoworks.co.uk
 Powerstation
www.powerstation.org.uk
 RG Motorsport
www.rgmotorsport.co.uk
 Ross Sport
www.rosssport.com
 Sumo Power
www.sumopower.com
 Wallace Performance
www.wallaceperformance.co.uk

TOYOTA SUPRA MK4

YOU CAN NOW PICK UP A CHERISHED TOYOTA SUPRA TWIN TURBO FOR AS LITTLE AS £6000. BUT WHAT SHOULD YOU BE LOOKING OUT FOR?

BUYING GUIDE

Toyota's Mk4 Supra was launched in Japan in late 1992 in normally-aspirated 2997cc 220bhp form and a much more desirable twin-turbocharged 276bhp version. This model was further tweaked for the US and UK markets with the official 1993-1996 UK models packing 326bhp. Boasting curvaceous styling which still catches the eye today, the twin-turbocharged model was a genuine supercar. With sequential turbochargers performance was potent throughout the rev range and, if unlimited, the top speed was in excess of 170mph.

UK buyers could choose between six-speed manual and four-speed automatic versions, both claiming a limited-slip differential, traction control, a large rear spoiler and leather upholstery. Sadly official UK imports ceased in 1996 but production continued for Japan until 2002. JDM cars received a facelift in 1998 accompanying the introduction of VVT-i variable valve-timing powerplants. Most were just as well kitted out as the official UK models and many have made it to UK shores.

WHEELS AND TYRES

Unevenly worn or non-matching tyres suggest an uncaring owner so it's also wise to scour the alloys for any signs of kerbing or corrosion.

Worn front wheel bearings will make a grinding noise when you turn the wheel sharply at low speed on a downhill slope, and check that the car tracks straight on a flat bit of Tarmac. Supras can take pretty wide rubber, especially at the rear, which is useful considering the power they get tasked with to deliver to the Tarmac.

BRAKES

Check the discs for any signs of rust or scoring and where safe to do so carry out an emergency brake on the test drive. A wobbling steering wheel suggests warped front discs and there shouldn't be any judder from the steering wheel or pedals.

Even standard brakes should feel strong with little fade on the road – especially on cars equipped with the UK-spec twin-piston Brembo big brake option.

SUSPENSION

Suspension bushes, gearbox mounts and engine mounts can all perish with age. Turn the steering lock-to-lock when stationary – there should be no untoward noises. Drive for a while with the windows down and drive over a few speed humps – listen out for knocks from worn rear upper control arm bushes. Driveshafts are strong and last well, but dampers can wear and can be identified by a baggy ride and wallowy handling.

BODYWORK AND INTERIOR

Look out for any signs of accident damage – like overspray, uneven panel gaps or non-matching window glass. Stone chips are commonplace and check around the doors and boot for broken trim. Ensure that the chassis number matches that in the V5C and that the aircon runs cold. Check that the boot opens okay and stays up. The boot should contain a spare tyre, a jack and the owner's manual. The leather clad cabins tend to wear well but check for any aftermarket gauges and hidden damage. Flat batteries can cause immobiliser problems, and check that the roof doesn't rattle if it's an aerotop model.



TRANSMISSION

As with the engine, the Supra's six-speed Getrag manual box is also extremely strong and massively over-engineered, taking almost any amount of power in its stride. Clutches on manuals do eventually wear out – so look for a high biting point or any difficulty pulling away uphill. Try out every gear and boot the car in second from low speed. It should pull smoothly. Manual UK cars are the most desirable models but the autos are just as quick and smoother to drive, although marginally less frugal. Listen out for whining from the diff under load as this could indicate an expensive problem.

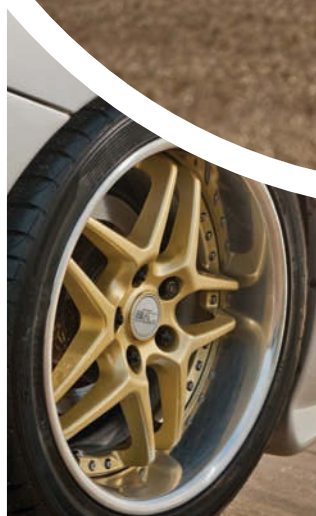
CLUBS AND FORUMS

www.mkivsupra.net
www.mkivsupraownersclub.com

TECH SPEC

MODEL	UK TWIN TURBO
ENGINE	2997CC
MAX POWER	326BHP AT 5600RPM
MAX TORQUE	325LBS FT AT 4800RPM
TRANSMISSION	6-SPEED MANUAL/4-SPEED AUTO
MAX SPEED	155MPH (LIMITED)
0-60MPH	5.1SECS

PRICE: £5500-£16,500



ENGINE

The 2JZ-GTE motor is about as bulletproof as they come, with the bottom end good for over 500bhp in stock form. However, any misfires, blue exhaust smoke, leaks from the engine, perished hoses, intermittent turbo boost or oil leaks could signal expensive problems.

Regular 9000-mile oil changes are vital, with plug changes every 27k miles and a new cambelt needed every 54,000. Head gaskets and turbos can go on older high-mile examples and, although most Supras have been tuned to some degree, you'd be wise to stick to lower-powered cherished examples.

The first turbo comes on boost from about 1500rpm and the second at 3800-4000rpm. All you should hear is the faint whistling of the turbos, with smooth and progressive boost. Also, ask whether the OE cats have been removed or replaced as it may struggle to pass an MOT emissions test without them.



TUNING GUIDE

BEFORE YOU TUNE:

The main tuning concerns with the Mk4 Supra are: whether the car is automatic or manual; turbo, or normally aspirated; a UK model or an import. The ultimate factory performer is a manual UK car, as it packs the almost indestructible six-speed Getrag gearbox, big brakes, larger turbos, higher lift and duration inlet cam, bigger injectors, a de-limited top speed and an extra 40bhp over the import model. Automatic twin-turbo versions are almost as capable as the manuals, and have a surprisingly sporty automatic gearbox. If your budget's tight, the non-turbo models, especially in manual form, can actually make a surprisingly good performance car, too, with around 220bhp through the five-speed W58 gearbox (although later facelift non-turbos also had the Getrag six-speed). There's a high number of tuning options available, too, although they lack the Torsen limited-slip diff of the turbo cars.

TUNING PROS AND CONS:

Because it's so robust in all areas, tuning a Supra is almost stress free, with very few issues even when going for big power. As we've mentioned, the twin-turbo manual is the one to go for, but is also the most expensive, but you can still make a serious performance machine out of an NA car as there is a massive amount of turbo conversion parts available. The one thing to be aware of is, over time, it can be a false economy, and starting with a higher spec twin-turbo to tune can actually work out more cost effective in the long run. The gearbox can be a limiting factor in the cheaper non-turbo and auto models, but don't be fooled into thinking you can do a cheap swap to a six-speed later down the line, as the Getrag units change hands for over £3000 on the used market, so is far from a budget option.



THANKS TO ITS BULLETPROOF ENGINE AND TRANSMISSION, TOYOTA'S ICONIC 1990S SUPERCAR IS STILL ONE OF THE MOST TUNABLE JAPANESE CARS AROUND, EVEN IN 2015!

STAGE ONE

First up for the turbo models is the BPU, or basic performance upgrade. This is basically a host of bolt-on upgrades that have a dramatic effect on the power. These consist of a full de-cat exhaust system, a fuel cut defender to remove the boost cut, and a colder grade of spark plug along with an uprated fuel pump on Jap-spec cars – UK cars come with a larger Denso pump as standard.

This should give you around 400bhp with just these simple bolt-on mods. UK cars will also need a boost controller to allow the boost to be increased to around 1.2bar, and on Japanese-spec cars you need an exhaust restrictor ring to limit the boost to around 1.2bar. This is due to the Japanese spec engine needing this restriction because the standard wastegates are very small which, without the restrictor, can cause the boost to increase to over 1.6bar, causing severe engine and turbo damage. Beyond these basics, other additions that can help at this level are a large front-mount intercooler and a piggyback, or even aftermarket, ECU, which can allow increased power and boost levels over the basic BPU, especially on UK models.

Away from the motor, it is also advisable to fit a height adjustable coilover kit to stiffen the ride and transform the Supra from a heavy barge into a taut track weapon.

STAGE TWO

Stage two kicks off with a big bore exhaust system. Depending on the sort of power level you are intending in the future a 3.0in system will cover most bases, but for crazy four-figure outputs a fat 4.0in item is required. At this point you will also need to replace the standard turbos and fuel system, and while hybrid sequential turbos can push up to 600bhp, this is a rare choice as a single turbo conversion usually means more peak power, better midrange performance and a less complex engine bay. Everything you need is widely available in single turbo conversion kits or component form from cast manifolds and turbos that respond almost as fast as the stock twins, to huge twin-scroll twin-wastegate manifolds and a vast range of monster blowers from the likes of Garrett, Borg Warner and Precision.

Exactly what power level is safe on standard internals is a matter for debate but, at around 600 to 700bhp, the stock innards should still be able to cope. However, as you can imagine, the higher your power level, the less time you can expect things to last.

Various supporting mods are also needed for a single turbo conversion, including bigger fuel injectors and fuel pump(s), an aftermarket ECU such as a Syvecs, AEM, MoTeC or Link system, on top of the upgrades from stage one.

Away from the engine, an uprated clutch will be needed if your car is a manual, and an uprated brake kit is also a sensible choice considering the power.

Finally, a set of stiffer polyurethane bushes from Polybush or SuperPro can make the car feel far more taut and responsive to your steering and pedal inputs.



STAGE THREE

Although you can push extreme power levels on stock engine internals, this is only truly possible on race fuel due to the very high boost pressures needed. To maximise power levels and the useable rev limit on the standard bottom end without extreme boost levels, a modified head and cams is a good option on the 2JZ engine. Effectively porting a head on a 2JZ is no easy task, so the price is high, but the effects are very noticeable, especially with larger valves installed. Higher lift and longer duration cams, along with uprated valve springs and retainers from the likes of Ferrera, Brian Crower and Supertech are also vital at this level, giving more power for any given amount of boost. They also allow the rev limit to be increased. As the head is off for upgrades, it makes sense to change the head bolts to ARP studs and, if you wish, you could also fit an uprated head gasket from the likes of Cometic or HKS – although many consider the standard item to be perfectly fine even on 1000bhp+ engines. Garage Whifbitz uses a standard Toyota head gasket on its 1300bhp Supra.

For owners still running a stock auto 'box, if it hasn't already failed, it's on borrowed time, and an upgrade, or a swap to a six-speed manual, is required. The manual swap is the most popular option, but Florida-based Titan Motorsport produce an upgraded auto 'box capable of handling over 800bhp and comes with a number of optional raised stall speeds for the torque converter – making it far more effective on cars running big single turbos than the standard unit.

Also, with the power levels now so extreme some wider wheels and tyres will be needed to contain the grunt. Thankfully the Supra has huge standard arches meaning 9- or even 10in front wheels with 245 wide tyres, and huge 10 or 11in wide rear wheels with at least 275 wide tyres are commonplace.

Finally, a great way to increase all-round performance is to put the heavyweight Supra on a diet. Significant amounts of weight can be removed by stripping the interior, and fitting lightweight FRP and carbon panels such as the bonnet, boot lid and even doors. All of which are available and weigh a fraction of the standard items.



TUNERS

Garage 786
www.garage786.co.uk
 Austec Racing
www.toyotasupratuning.co.uk
 BoostLogic
www.boostlogic.com
 Fensport
www.fensport.co.uk
 JPS Motorsport
www.jpsmotorsport.com
 Supra Racing Developments
www.supracingdevelopment.co.uk
 Syvecs
www.syvecs.com
 Titan Motorsports
www.titanmotorsports.com
 Whifbitz
www.garagewhifbitz.co.uk

THE MOST LEGENDARY OF ENGINES THE SUPRA'S 3.0-LITRE, SIX-CYLINDER 2JZ-GTE MOTOR IS ONE OF THE TUNING SCENE'S TRUE POWERHOUSES, CAPABLE OF ALMOST UNLIMITED LEVELS OF POWER. SIMPLE BOLT ON MODS CAN SEE THE TWIN TURBO'D MOTOR HITTING OVER 400BHP, BUT A SWAP TO A BIG SINGLE TURBO AND CORRESPONDING FUELING AND MAPPING CAN SEE THE MOTOR WELL OVER 600BHP, WHILE STILL RETAINING THE STOCK INTERNALS. THEY DON'T MAKE 'EM LIKE THAT ANYMORE!

MAZDA 3 MPS

BUYING GUIDE

AS THE MOST POWERFUL AND FEATURE-LADEN HOT HATCH OF ITS GENERATION, THE FIRST-GENERATION MAZDA 3 MPS IS A KILLER BASE FOR TUNING. BUT WHAT SHOULD PROSPECTIVE BUYERS WATCH OUT FOR?

Understated styling, storming performance, affordable prices and a readily tunable turbocharged engine have made the first-generation Mazda 3 MPS one of the best hot-hatch buys in Britain. With a 155mph top speed, the 2.3-litre 3 MPS produces 256bhp in standard trim and hits 62mph in just 6.1 seconds.

Launched in February 2007 priced at £18,995, the front-wheel drive MPS included part-leather sports seats, ABS, EBD, DSC and traction control, a limited-slip diff, 18in alloys, tinted glass, Xenon headlamps, climate control, cruise control and a Bose audio system. Electronic control modulates the MPS's 280lb ft of torque to minimise torque-steer, while the limited-slip diff maximises traction.

A popular £500 optional Aero Sports Styling Pack gave a larger rear spoiler and Eibach springs and revised dampers. This lowered the car 10mm at the rear and 25mm at the front, improving handling significantly. Production ended in 2009 but the 3 MPS is still one of the most reliable high-performance cars on the road.

WHEELS AND TYRES

There have been a few examples of OE alloy wheels which have started to corrode. These can be repaired under an extended warranty – otherwise get quotes for a decent refurbishment. Uneven tyre wear suggests the tracking is out – worn front inside tyre edges are common, and listen out for rumbling wheel bearings.

BRAKES

As you might expect, the front tyres and front brake pads come in for a battering and will wear quickly. Front discs won't last for ever, either. Check both the front and back brakes for any signs of rust or heavy scoring, and warped discs will send vibrations through the steering wheel under heavy braking.

SUSPENSION

MPS owners have reported a variety of different worn suspension components, which is to be expected as the model ages. These include shock absorbers, springs, bushes, anti-roll bars, drop-links, bump stops, track rod ends and lower suspension arms. And a few have also suffered creaking power steering systems. The optional Aero Pack models come complete with stiffer and lower Eibach springs which give a firmer ride but also tighten up the handling.

BODYWORK AND INTERIOR

Most cars have been maintained to a high standard, so steer clear of any shabbier looking examples. Softish paint means front-end paint chips are a common problem, and watch out for any signs of water ingress into the headlamps, fog lights or boot. Check all panels for any indication of repaired crash damage.

Any MPS cabin should look absolutely mint, but do check for misbehaving windows and central locking systems, and stereos that won't tune properly. The air-con can need re-gassing every few years, and illuminated dashboard warning lights must be investigated properly before you consider making any kind of offer.



TRANSMISSION

The slick six-speed manual transmission can grate slightly in first and second gear when cold, but should become fluid once warmed up allowing for fast, precise gearchanges. Gearbox failures are very rare, but a small number of cars have needed expensive repairs. As you would expect with such reserves of power and torque on tap, worn clutches are more common – especially on high-milers or highly tuned examples – and can be costly to replace.

CLUBS AND FORUMS

www.mpsowners.co.uk

TECH SPEC

MODEL	MAZDA 3 MPS
ENGINE	2261CC 4CYL TURBO
MAX POWER	256BHP AT 5500RPM
MAX TORQUE	280LB FT AT 3000RPM
TRANSMISSION	6-SPEED MANUAL
MAX SPEED	155MPH (LIMITED)
0-60MPH	6.1SECS

PRICE: FROM £5K TO £9K

ENGINE

The Mazda 3 MPS's 2.3-litre turbocharged engine packs a whopping 256bhp from the factory so has plenty of grunt even before any tickling with the tuning stick, but needs regular servicing to stay at its peak. After an initial 3000-mile service your Mazda 3 MPS should have been serviced every 9000 miles or 12 months. If any service at all has been missed, just walk away. Look out for leaking turbo oil seals, failing ignition coils, any serious throttle hesitation and screeching noises from the cooling fans. A few cars have suffered traction control failure, and a handful have had blown turbos, but overall the MPS is a pretty reliable choice for a hot hatch with such ferocious performance.



TUNING GUIDE

BEFORE YOU TUNE

The Mazda 3 MPS is one of the least well known of the modern hot hatches, even though it's a seriously capable car. With a 2.3-litre turbocharged engine, six-speed gearbox and limited-slip diff, despite being front-wheel drive, the MPS can do 0-60mph in well under six seconds, and on to 155mph. The big attraction for us is its ability to be tuned, which is up there with the best. There are two generations of MPS, the original 2007-2009 model, and the second generation which appeared in 2010 and is still available to this day, but with the older car now available for around £5000, that's a lot of car for the money and is our MPS of choice to tune. If you are struggling with the looks, then the optional 'Aero' model comes with a few cosmetic tweaks and lowered suspension and is the looker of the pair.

TUNING PROS AND CONS

The MPS is a cracking car to tune. The conrods are the engine's weak point, but are still capable of over 400bhp. The standard exhaust, inlet, and top-mount intercooler are all poor performers, but mean impressive gains can be achieved by upgrading.

The injector seals can fail at big power, but are cheap and easy to replace. Also, the VVT solenoid can fail, and the fuel pump can struggle at even mild levels of tune.

On the plus side, the stock fuel injectors and ECU are proven at 500bhp, as is the standard head and cams.

The standard exhaust manifold features an unusual flange meaning no other common turbocharger will fit, but is an effective design with many manufacturers making MPS-specific turbos capable of up to 500bhp.

Lastly, the injectors have no upgrades currently available due to the uncommon direct injection setup, which can be a sticking point for anyone wanting over their 500bhp limit.



WHILE RELATIVELY IGNORED IN THE UK SCENE, THE MAZDA 3 MPS ACTUALLY HAS ONE OF THE MOST TUNABLE FOUR-CYLINDER ENGINES AROUND. HERE'S HOW...

STAGE ONE

As with most turbocharged cars, the tuning side of stage one consists of a simple remap that gives massive gains. Available in a variety of forms such as BBR's Star-Chip software upgrade, the EcuTec software upgrade or TurboPACS Response Performance software, they all give around 290bhp and a massive 330lb ft of torque, with very noticeable gains from 3000rpm until the 6600rpm rev limiter.

Beyond the engine, some lowered and uprated suspension is a great way of making the softly sprung and almost sensible feeling MPS feel and look a lot more sporty. If you have one of the optional Aero models, your car will already have uprated and lowered Eibach springs as standard, but even these can be improved. Koni adjustable shocks and lowering springs are popular, as are BC Racing height adjustable coilovers, but there are a wide variety available.

STAGE TWO

In the second stage of tuning you can make great gains from eliminating the standard engine's restrictions and bringing the engine to the limit of the standard turbo's flow. First up is an uprated mechanical fuel pump. This is the same as used on certain new performance VWs and are available from BBR, Autotech and others, and is a vital addition to prevent lean running and engine failure. Next up is to remove the standard exhaust system and replace it with a turbo-back 3.0in system, including downpipe and de-cat, which is available from the likes of BBR, Corksport and others. The inlet is just as restrictive as the exhaust, but there are a huge amount of upgrades available, with K&N, Cobb, CorkSport, AEM and more all having induction kits available. Top-mount intercoolers are never hugely efficient, and at this level the standard one really needs replacing. AutoEXE, Streetunit and ETS all make uprated top-mount 'coolers but, for a little more work, a full front-mount intercooler conversion from the likes of BBR, Cobb and ATP is the ideal solution. This lot, along with a suitable remap, should see you at the limit of the standard K04 turbocharger, which is around 320bhp and a massive 370lb ft of torque, all with no loss of low down power and massive performance gains from around 3000rpm upwards.

Beyond the engine, a front strut brace is a small but effective upgrade. It's a DIY fit, and is available from Whiteline. It's worth noting that front strut braces don't fit with the standard top mount intercooler, so this needs doing after the front-mount 'cooler is fitted.



STAGE THREE

The next change is the standard turbo, which was taken to its limit in stage two. Due to the unique turbo flange you have a slightly limited choice, but there are plenty of direct replacement options thanks to the various MPS tuners worldwide. What you choose depends on your future plans. If you want to keep standard internals and around 350bhp this can even be done while keeping standard turbo spool-up speeds. Popular options are the BNR 'Stage 1' turbo, which uses Garrett GT28RS internals, a Total MPS hybrid turbo, which features a billet compressor wheel, or BBR's own 'Stage 1' hybrid turbo. If you expect you'd like a little more power, then the American BNR 'Stage 3' unit is a popular option, and is a hybrid based on a mix of K04, GT2871 and HT18 turbo components. BBR also do a 'Stage 2' unit of a similar spec if you'd prefer a UK-based option, and while you do lose a little low down power, the car is still very drivable and easy to use. With one of these hybrids fitted along with a 3.0bar MAP sensor, to enable the boost to be raised above 20psi, an uprated in-tank fuel pump, the upgrades already mentioned in earlier sections, and yet another remap to suit the new turbo, people have seen a reliable 350bhp and almost 400lb ft, along with no loss of low rpm performance and an increased high rpm rev range.

With the car quickly approaching supercar-chasing levels of power it's a wise move to beef up the stopping and cornering ability, this time with uprated anti-roll bars, poly bushes and a brake disc and pad upgrade. Whiteline are popular for MPS uprated ARBs, and it's very wise to replace the suspension bushes at the same time to save on labour costs. PowerFlex are the usual supplier of the bushes, and these two upgrades make the MPS feel much sharper and more stable when being pushed hard in the corners. MPSs aren't the lightest of cars, and while the stock brakes perform quite well, they do wear fast and may struggle to cope with hard use, especially if you're planning to hit the track. Direct replacement upgrade discs and pads are available from a wide variety of companies.



TUNERS

BBR
www.bbrgti.com
 Ecutek
www.ecutek.com
 Mountune
www.mountune.com
 Total MPS
www.total-mps.co.uk
 TurboPACS
www.turbopacs.com

THE UNUSUAL SUSPECT

THE MAZDA 3 MPS IS ONE OF THE LESSER KNOWN HOT HATCHES IN THE JAPANESE SCENE, WHICH IS STRANGE, ESPECIALLY CONSIDERING THAT BEFORE THE ANNOUNCEMENT OF THE NEW CIVIC TYPE R JUST RECENTLY IT WAS THE MOST POTENT JAPANESE HATCH YOU COULD BUY! IT'S GOT GREAT SCOPE FOR TUNING, TOO. HOWEVER, UNIQUE INJECTORS AND TURBOCHARGERS MEAN IT'S NOT AS STRAIGHTFORWARD AS MANY OTHER MODELS TO GET BIG POWER, EVEN THOUGH IT IS POSSIBLE. POSSIBLY THE ONLY DOWNSIDE TO THE MPS IS ITS UNDERSTATED LOOKS AND LIMITED AVAILABILITY OF STYLING MODS. HOWEVER, WE RECKON SIMPLY SLAM A HIGHLY TUNED AERO MODEL ON SOME SWEET RIMS AND THE MPS CAN BE QUITE A LOOKER!

BC

street & circuit
PERFORMANCE SUSPENSION SYSTEMS

BUILT WITH PRECISION MEASURED BY SUCCESS

BC Racing are renowned worldwide for their high performance suspension systems. Now available for over 500 vehicle applications.

FEATURES

- Pillowball upper mount
- Camber adjustable top mounts
- Aluminium top plates
- 30 way adjustable damping
- Adjustable spring platform
- Height adjustable bottom mount
- Bearing mounted spring platforms
- Dust boot to protect damper seals
- High quality body finish
- Springs and accessories available

* features depend on application



EVERY DAMPER DYNO TESTED

Every BC Racing damper is dyno tested in-house. Our coilover kits are only assembled using matched dampers to ensure equal and efficient damping throughout their range.

Because we only use matched coilovers, you're assured of maximum stability, handling and performance on both the street and circuit.



WIN! A SET OF COILOVERS

Come and set a lap time in the BC Racing F1 simulator.

You'll find it in the BC stand at various shows this year. The fastest time of the day wins a set of BR Series coilovers of your choice. It's free to enter!



TRAX
THE ULTIMATE PERFORMANCE CAR EVENT

Silverstone
Sunday 19th July

PVS
THE PERFORMANCE VEHICLE SHOW

Santa Pod
Sunday 7th June

JAPFEST
EUROPE'S BIGGEST JAPANESE CAR SHOW

Rockingham
Sunday 16th August



ford fair
EUROPE'S BIGGEST & BEST FORD FESTIVAL

Silverstone
Sunday 2nd August

Street, fast road and track spec coilovers from just £699

0% FINANCE AVAILABLE



WWW.BCRACING.CO.UK
CALL 01274 683 633

TRADE ENQUIRIES WELCOME. E&OE. PRICES SHOWN INCLUDE VAT. SEE WEBSITE FOR LATEST SPECIFICATIONS

apex
PERFORMANCE

BC
street & circuit

K-SPORT

ÖHLINS

HARDRACE

D2

